SONY

KV32XBR85/55

MODEL

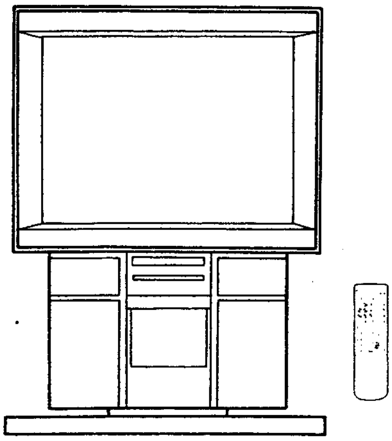
SERVICE MANUAL

KV-29XBR85

RM-Y108

SERVICE MANUAL

US Model
Chassis No. SCC-E28F-A
Canadian Model
Chassis No. SCC-E35F-A



ANU-1A CHASSIS

MODELS OF THE SAME SERIES	
KV-29XBR85	
ANU-1A CHASSIS	
KV-32XBR75	

SPECIFICATIONS

Television system	American TV standards
Channel coverage	VHF: 2 – 13 UHF: 14 – 69 Cable TV: 1 – 125
Picture tube	Microblack Trinitron tube 32-inch picture measured diagonally 34-inch picture tube measured diagonally
Antenna	75-ohm external antenna terminal for VHF/UHF
Input	VIDEO 1, 2 and 3 IN S VIDEO IN (4-pin mini DIN) Y: 1 Vp-p, 75 ohms unbalanced, sync negative C: 0.286 Vp-p (Burst signal) 75-ohms Video (phono jacks): 1 Vp-p, 75-ohms unbalanced, sync negative Audio (phono jacks): 500 mVrms (100% modulation) Impedance: 47 kilohms
Output	MONITOR OUTPUT S VIDEO OUTPUT (4-pin mini DIN) Y: 1 Vp-p, 75-ohms unbalanced, sync negative C: 0.286 Vp-p (Burst signal) 75-ohms Video (phono jacks): 1 Vp-p, 75-ohms unbalanced, sync negative Audio (phono jacks): 500 mVrms (100% modulation) Impedance: 10 kilohms AUDIO OUTPUT (VARIABLE) (phono jacks) More than 408 mVrms at the maximum volume setting (variable) Impedance: 5 kilohms
Speaker output	Main speakers 14W × 2: 8-ohm minimum Super woofer 40W: 8-ohm minimum
Speaker size	Full range Main 87mm×2 (3½INC) Woofer 100mm×1 (4INC)

MICROFILM

TRINITRON® COLOR TV

SONY®

Audio frequency response	Main 100Hz – 20kHz Woofer 20Hz – 100Hz
Power requirements	120V AC, 60Hz
Power consumption	360W (Max.) 2W (Standby)
Dimensions (w/h/d)	Approx. 769 × 1132.5 × 736 mm (30⅜ × 44⅝ × 29 inches)
Weight	Approx. 112.8kg(248lb 11oz)

Accessories supplied
YES: supplied NO: not supplied

Programmable Commander	RM-Y108 with 2 size AA (R6) batteries (1)
Mini Commander	YES
Speakers and speaker cords	Main speakers (2) Super woofer (1) Speaker cords (2) and screws (4) for main speakers
Antenna connector (1)	YES

Programmable Commander	RM-Y108 with 2 size AA (R6) batteries (1)
Mini Commander	NO
Speakers and speaker cords	NO
Antenna connector (1)	YES

Optional accessories
U/V mixer EAC-66
Connecting cable
  VMC-810/820S
  YC-15V/30V
Video rack
  SU-251 (black)
  SU-330 (black)

Design and specifications are subject to change without notice.

(CAUTION)
SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR CARBON PAINTED ON THE CRT, AFTER REMOVING THE ANODE.

SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL TO SAFE OPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED.

(ATTENTION)
APRES AVOIR DECONNECTE LE CAP DE L'ANODE, COURT-CIRCUITER L'ANODE DU TUBE CATHODIQUE ET CELUI DE L'ANODE DU CAP AU CHASSIS METALLIQUE DE L'APPAREIL, OU AU COUCHE DE CARBONE PEINTE SUR LE TUBE CATHODIQUE OU AU BLINDAGE DU TUBE CATHODIQUE.

ATTENTION AUX COMPOSANTS RELATIFS À LA SÉCURITÉ!!

LES COMPOSANTS IDENTIFIÈS PAR UNE TRAME ET PAR UNE MARQUE ⚠ SUR LES SCHÉMAS DE PRINCIPE, LES VUES EXPLOSÉES ET LES LISTES DE PIECES SONT D'UNE IMPORTANCE CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT. NE LES REMPLACER QUE PAR DES COMPOSANTS SONY DONT LE NUMÉRO DE PIÉCE EST INDIQUÉ DANS LE PRÉSENT MANUEL OU DANS DES SUPPLÉMENTS PUBLIÉS PAR SONY. LES RÉGLAGES DE CIRCUIT DONT L'IMPORTANCE EST CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT SONT IDENTIFIES DANS LE PRÉSENT MANUEL. SUIVRE CES PROCÉDURES LORS DE CHAQUE REMPLACEMENT DE COMPOSANTS CRITIQUES, OU LORSQU'UN MAUVAIS FONCTIONNEMENT EST SUSPECTÉ.

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SAFETY CHECK-OUT

(US model only)

After correcting the original service problem, perform the following safety checks before releasing the set to the customer:

1. Check the area of your repair for unsoldered or poorly-soldered connections. Check the entire board surface for solder splashes and bridges.
2. Check the interboard wiring to ensure that no wires are "pinched" or contact high-wattage resistors.
3. Check that all control knobs, shields, covers, ground straps, and mounting hardware have been replaced. Be absolutely certain that you have replaced all the insulators.
4. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
5. Look for parts which, though functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.
6. Check the line cord for cracks and abrasion. Recommend the replacement of any such line cord to the customer.
7. Check the condition of the monopole antenna (if any).
   Make sure the end is not broken off, and has the plastic cap on it. Point out the danger of impalement on a broken antenna to the customer, and recommend the antenna's replacement.
8. Check the B+ and HV to see they are at the values specified. Make sure your instruments are accurate; be suspicious of your HV meter if sets always have low HV.
9. Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

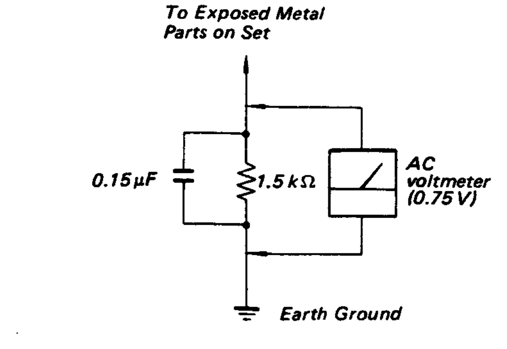


Fig. A. Using an AC voltmeter to check AC leakage.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microampers). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2 V AC range are suitable. (See Fig. A)

HOW TO FIND A GOOD EARTH GROUND

A cold-water pipe is guaranteed earth ground; the cover-plate retaining screw on most AC outlet boxes is also at earth ground. If the retaining screw is to be used as your earth-ground, verify that it is at ground by measuring the resistance between it and a cold-water pipe with an ohmmeter. The reading should be zero ohms. If a cold-water pipe is not accessible, connect a 60–100 watts trouble light (not a neon lamp) between the hot side of the receptacle and the retaining screw. Try both slots, if necessary, to locate the hot side of the line, the lamp should light at normal brilliance if the screw is at ground potential. (See Fig. B)

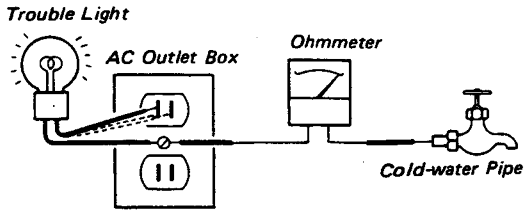
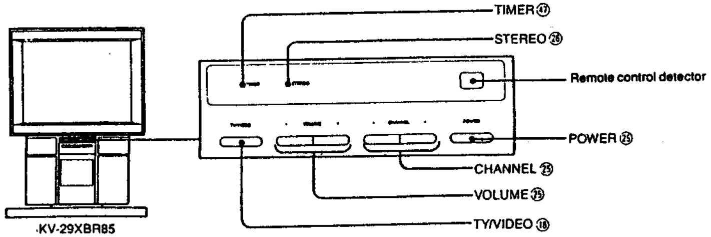


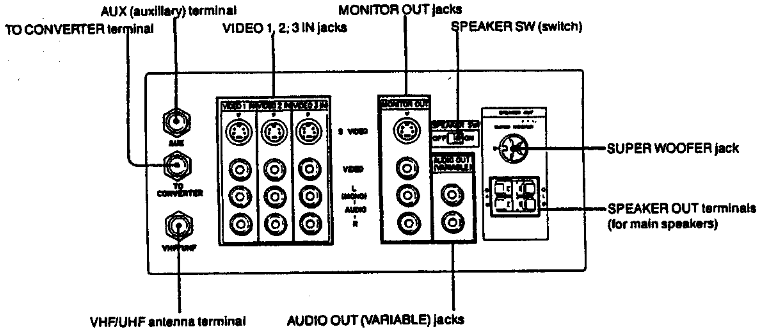
Fig. B. Checking for earth ground.

SECTION 1
GENERAL

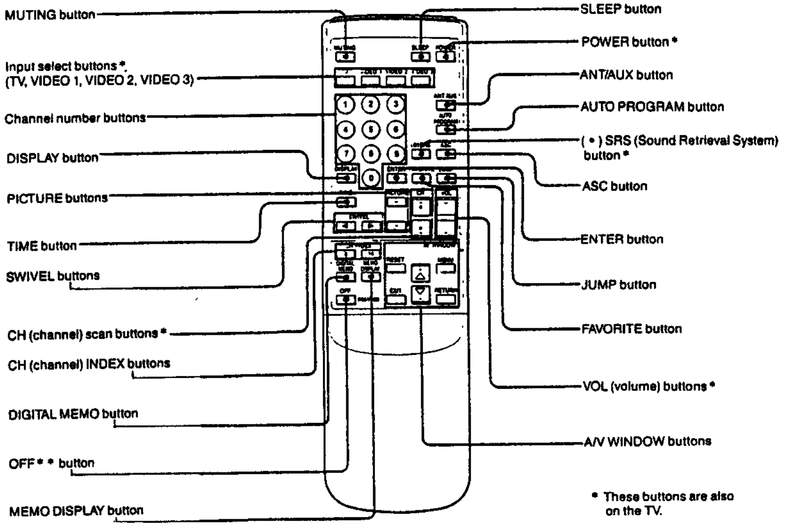
1-1. NAMES OF THE PARTS


TIMER ㊼
STEREO ㉖
Remote control detector
POWER ㉕
CHANNEL ㉕
VOLUME ㉕
TY/VIDEO ⑱
KV-29XBR85

Rear


AUX (auxillary) terminal
TO CONVERTER terminal
VIDEO 1, 2; 3 IN jacks
MONITOR OUT jacks
SPEAKER SW (switch)
SUPER WOOFER jack
SPEAKER OUT terminals
(for main speakers)
VHF/UHF antenna terminal
AUDIO OUT (VARIABLE) jacks

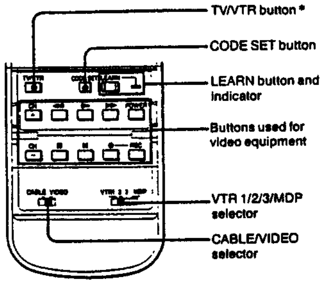
Programmable Remote Commander


MUTING button
Input select buttons *
(TV, VIDEO 1, VIDEO 2, VIDEO 3)
Channel number buttons
DISPLAY button
PICTURE buttons
TIME button
SWIVEL buttons
CH (channel) scan buttons *
CH (channel) INDEX buttons
DIGITAL MEMO button
OFF * * button
MEMO DISPLAY button
SLEEP button
POWER button *
ANT/AUX button
AUTO PROGRAM button
(•) SRS (Sound Retrieval System) button *
ASC button
ENTER button
JUMP button
FAVORITE button
VOL (volume) buttons *
A/V WINDOW buttons

* These buttons are also on the TV.

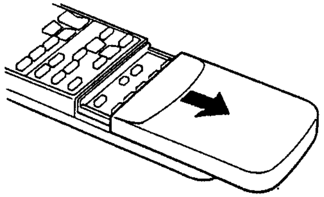
** This button has the same function as OFF inside the cover.

Buttons inside the cover

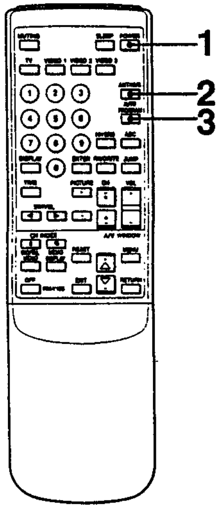

TV/VTR button *
CODE SET button
LEARN button and indicator
Buttons used for video equipment
VTR 1/2/3/MDP selector
CABLE/VIDEO selector

To use the buttons inside the cover

Slide down the cover.



1-2. PRESET TV CHANNELS

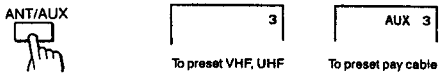


To Preset All Receivable Channels Automatically

Only with pressing a button, on can preset all receivable channels automatically.

1 Press POWER on the TV or the Remote Commander to turn the TV on.

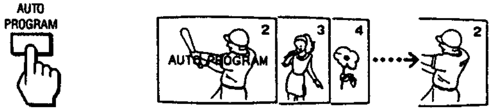
2 Press ANT/AUX according to the channel to be preset.


ANT/AUX
3
AUX 3

To preset VHF, UHF or regular cable TV channels

To preset pay cable TV channels

3 Press AUTO PROGRAM.


AUTO PROGRAM
AUTO PROGRAM
2
3
4
2

"AUTO PROGRAM" is displayed on the screen and receivable channels (other than the channels already preset) will be preset in numerical sequence. The channels previously preset remain in the unit's memory.
When no more channels can be found, the programming stops and the lowest numbered channel is displayed.

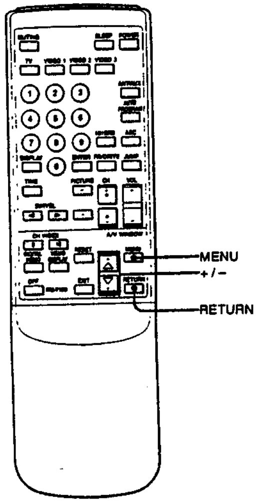
Notes

Receivable channels of this TV are:
VHF: 2-13
UHF: 14-69
Cable: 1-125

To check preset channels
Press CH +/–.

If the indication "VIDEO 1, VIDEO 2, VIDEO 3, S VIDEO, LD, or VTR" is displayed on the screen
Press the TV/VIDEO button on the TV or the TV button on the Remote Commander so that a channel number appears.

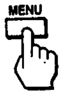
Without presetting
You can watch TV channels by using the 0-9 buttons and ENTER.

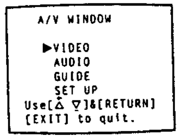


To Turn the Cable Mode Off (or On)

If you have cable connected to your TV, follow the steps below to turn the cable connection off or on. Turn cable OFF when you want to preset or watch VHF or UHF channels, and turn cable ON to preset or watch cable TV channels.

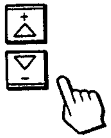
1 Press MENU.

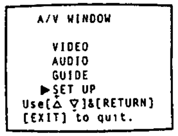




```
   A/V WINDOW

  ▶VIDEO
   AUDIO
   GUIDE
   SET UP
Use[△ ▽]&[RETURN]
[EXIT] to quit.
```

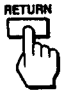
2 Press + / – until ▷ points to "SET UP".

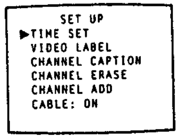




```
   A/V WINDOW

   VIDEO
   AUDIO
   GUIDE
  ▶SET UP
Use[△ ▽]&[RETURN]
[EXIT] to quit.
```

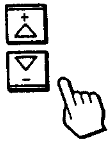
3 Press RETURN.

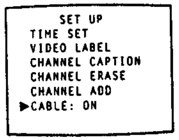




```
      SET UP
▶TIME SET
 VIDEO LABEL
 CHANNEL CAPTION
 CHANNEL ERASE
 CHANNEL ADD
 CABLE: ON
```

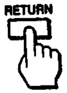
4 Press + / – until ▷ points to "CABLE".

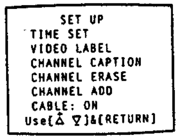




```
      SET UP
 TIME SET
 VIDEO LABEL
 CHANNEL CAPTION
 CHANNEL ERASE
 CHANNEL ADD
▶CABLE: ON
```

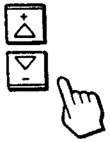
5 Press RETURN.

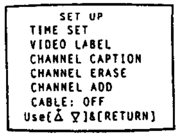




```
      SET UP
 TIME SET
 VIDEO LABEL
 CHANNEL CAPTION
 CHANNEL ERASE
 CHANNEL ADD
 CABLE: ON
Use[△ ▽]&[RETURN]
```

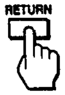
6 Press + / – until the cable is turned off (or on).

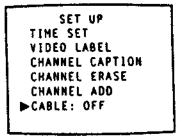




```
      SET UP
 TIME SET
 VIDEO LABEL
 CHANNEL CAPTION
 CHANNEL ERASE
 CHANNEL ADD
 CABLE: OFF
Use[△ ▽]&[RETURN]
```

7 Press RETURN.





```
      SET UP
 TIME SET
 VIDEO LABEL
 CHANNEL CAPTION
 CHANNEL ERASE
 CHANNEL ADD
▶CABLE: OFF
```

Note

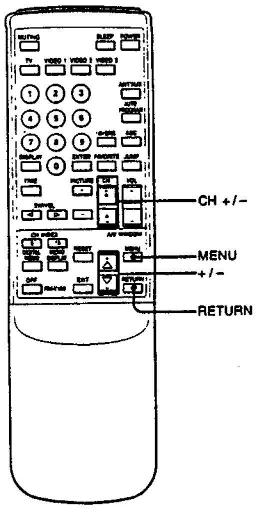
Cable TV channel chart*

Cable TV systems use letters or numbers to designate channels. To tune in a channel, refer to the chart below.

Number on this TV	Corresponding CATV channel
1	A-8
5	A-7
6	A-6
14	A
15	B
16	C
17	D
18	E
19	F
20	G
21	H
22	I
23	J
24	K
25	L
26	M
27	N
28	O
29	P
30	Q
31	R
32	S
33	T
34	U
35	V
36	W
37	W+1
38	W+2
39	W+3
⋮	⋮
93	W+57
94	W+58
95	A-5
96	A-4
97	A-3
98	A-2
99	A-1
100	W+59
101	W+60
102	W+61
⋮	⋮
123	W+82
124	W+83
125	W+84

Check with your local cable TV company for more complete information on the available channels.

* The designation of the cable TV channels conforms to the EIA/NCTA recommendation.



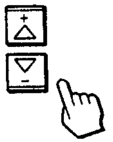
Note

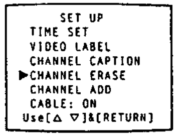
If you have erased a VHF or UHF channel
The cable TV channel with the same number is also erased and vice versa.

To Erase TV Channels

Steps 1 – 3: Same as in "To Turn the Cable Mode Off (or On)"

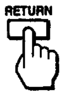
4 Press +/– until ▷ points to "CHANNEL ERASE".

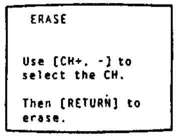




```
      SET UP
  TIME SET
  VIDEO LABEL
  CHANNEL CAPTION
 ▶CHANNEL ERASE
  CHANNEL ADD
  CABLE: ON
 Use[△ ▽]&[RETURN]
```

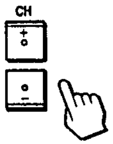
5 Press RETURN.

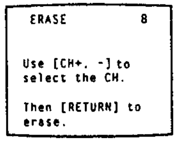




```
 ERASE

Use [CH+, -] to
select the CH.

Then [RETURN] to
erase.
```

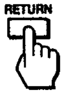
6 Press CH +/– to set the desired channel.

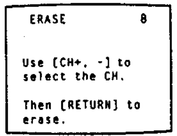




```
 ERASE          8

Use [CH+, -] to
select the CH.

Then [RETURN] to
erase.
```

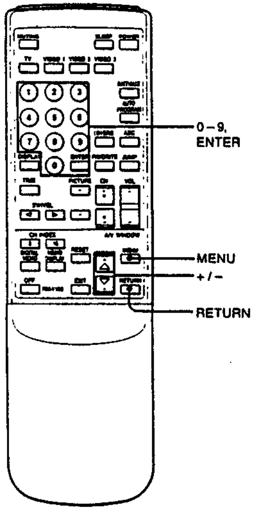
7 Press RETURN.





```
 ERASE          8

Use [CH+, -] to
select the CH.

Then [RETURN] to
erase.
```

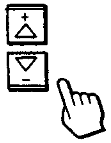
The channel is erased.
If you want to erase another channel, repeat steps 6 – 7.

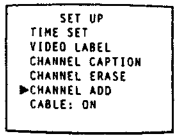


To Add TV Channels

Steps 1 – 3: Same as in "To Turn the Cable Mode Off (or On)" (page 21).

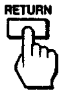
4 Press +/– until ▷ points to "CHANNEL ADD".

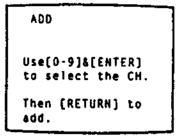




```
      SET UP
  TIME SET
  VIDEO LABEL
  CHANNEL CAPTION
  CHANNEL ERASE
 ▶CHANNEL ADD
  CABLE: ON
```

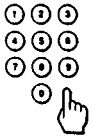
5 Press RETURN.

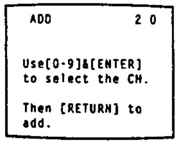




```
 ADD

Use[0-9]&[ENTER]
to select the CH.

Then [RETURN] to
add.
```

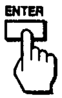
6 Press 0 – 9 to set the desired channel.



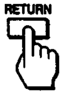


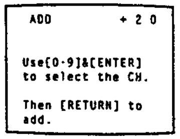
```
 ADD           2 0

Use[0-9]&[ENTER]
to select the CH.

Then [RETURN] to
add.
```

7 Press ENTER.



8 Press RETURN.

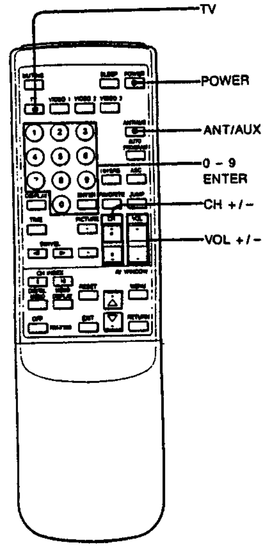




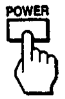
```
 ADD         + 2 0

Use[0-9]&[ENTER]
to select the CH.

Then [RETURN] to
add.
```

The channel is added.
If you want to add another channel, repeat steps 6 – 8.

1-3. WATCHING TV PROGRAMS



1 Press POWER on the TV or the Remote Commander to turn on the TV.



---

2 Press ANT/AUX according to the channel to be watched.
If you want to change the cable mode,

```
3
```

To view VHF, UHF or regular cable TV channels

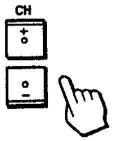
```
AUX 3
```

To view pay cable TV channels

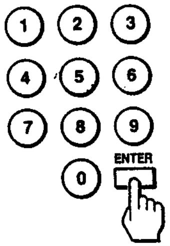
---

3 Select a channel in one of the following two ways:

To scan the preset channels in numerical sequence, press CH + / –.

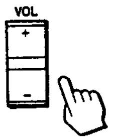


To select a channel directly, press the channel number button(s) and then ENTER.
For example, to select channel 10, press 1, 0 and ENTER.



---

4 Press VOL + or – to adjust the volume.



Notes

To turn off the TV
Press POWER on the TV or the Remote Commande again.

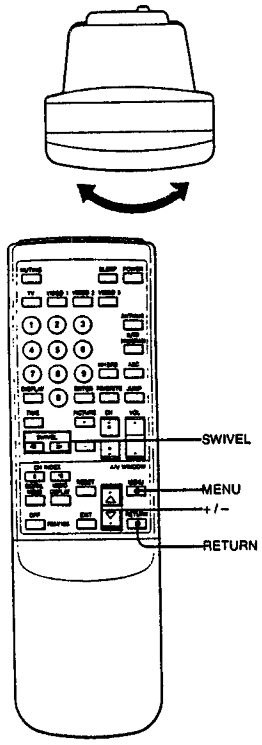
If the indication "VIDEO 1, VIDEO 2, VIDEO 3, S VIDEO, LD, or VTR" is displayed on the screen
Press TV on the Remote Commander.

If you set the FAVORITE CHANNEL
You can choose the channels more easily.

1-4. ADJUSTING THE SWIVEL

Press SWIVEL ◄/► to swivel the TV.
You can adjust the angle by 15 degrees in each direction.

TV top view



Notes

On activating degauss
When you swivel the screen right after activating the degauss function, wait for 5 minutes or more before activating it again.

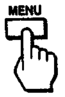
During activating degaussing
The picture may be confused.

When rotating the TV on its swivel
Be careful that the corners of the TV casing do not hit obstructions, thus marring the finish.

Activating Degaussing

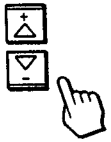
When you use the SWIVEL function, the picture may suffer from color shading. If this occurs, you can adjust it by activating the degauss function.

1 Press MENU.



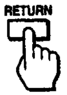
```
   A/V WINDOW

   ►VIDEO
    AUDIO
    GUIDE
    SET UP
Use[△ ▽]&[RETURN]
[EXIT] to quit.
```

2 Press + / – until ▷ points to "GUIDE".



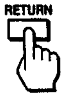
```
   A/V WINDOW

    VIDEO
    AUDIO
   ►GUIDE
    SET UP
Use[△ ▽]&[RETURN]
[EXIT] to quit.
```

3 Press RETURN.



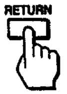
```
        GUIDE

►ON/OFF TIMER
 CHANNEL BLOCK
 FAVORITE CHANNEL
 DEGAUSS
```

4 Press + / – until ▷ points to "DEGAUSS".



```
        GUIDE

 ON/OFF TIMER
 CHANNEL BLOCK
 FAVORITE CHANNEL
►DEGAUSS
```

5 Press RETURN.



The degauss function is activated.

1-5. WATCHING TWO OR MORE CHANNELS AT THE SAME TIME
(The models equipped with this functions)

You can watch two or more channels at the same time.

- ***When watching two channels** (the main picture and a window picture)*

  You can:
  - *swap the main and the window picture.*
  - *change the position of the window picture.*
  - *replay the main picture displayed 2 seconds before in the window picture.*
  - *split the screen with the main and the window picture.*
  - *store a TV picture.*
- ***When watching more channels** (the main picture and several window pictures)*

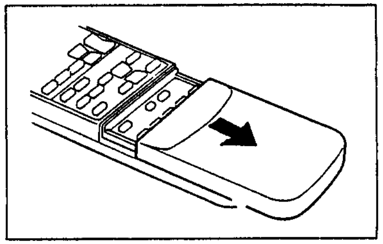
  You can:
  - *watch 8 different channels*
  - *watch 16 different channels*
- ***You can scan other channels***

Note

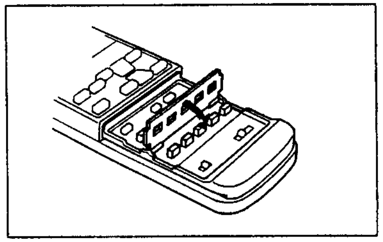
For KV-32XBR75
When you press MULTI PICTURE on the TV, the picture-in-picture features will be demonstrated.
To cancel the demonstration, press OFF.

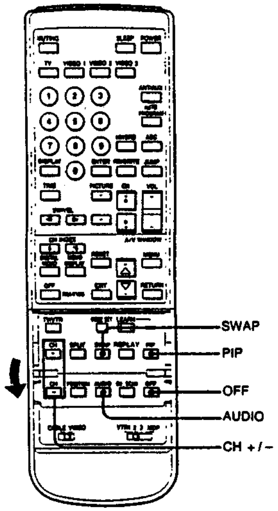
Preparation

1 Slide the cover of the supplied Remote Commander.



2 Flip down the panel to use the picture-in-picture area.





Notes

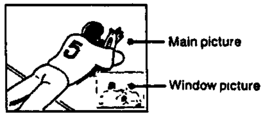
To make the window picture disappear
Press OFF.

To scan programs in the window picture
Press CH +/− in the picture-in-picture area.

Notes on the window picture
- In the window picture, the VIDEO LABEL and CHANNEL CAPTION will not appear even if you have set them.
- If a window picture is blocked, the "B" indication will appear on the window screen.

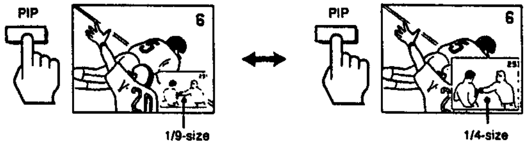
Watching a Window Picture

Besides the main picture, you can watch another TV channel (including CATV) or a video source simultaneously in a window picture.
You can enjoy the convenience of the "picture-in-picture" function when there are two TV channels you want to watch at the same time or when you want to monitor your VCR while watching TV, etc.



To display a TV program in a window

Press PIP.

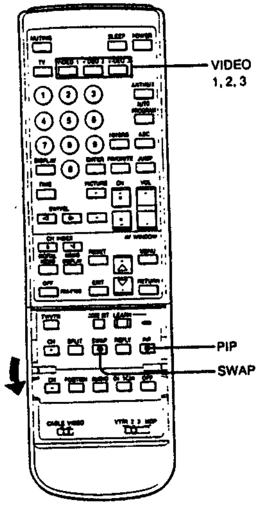


1/9-size 1/4-size

The window picture in the last mode you watched will appear. Each time PIP is pressed, a 1/4-size or 1/9-size window picture will appear alternately.

To hear the sound for the window picture
Press AUDIO.
To hear the sound for the main picture, press AUDIO again.
- The sound of the window picture is also output from the VARIABLE AUDIO OUT.
  (The MONITOR OUT outputs the sound of the main picture only.)
- The sound for the window picture is monaural when you use the RFU output.
- When you press AUDIO, the "♪" indication appears and you can know the sound comes from which.

To swap the main and the window pictures
Press SWAP.



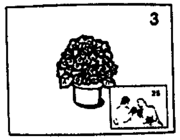
Note

With the supplied Remote Commander
You cannot control VCR without settings.

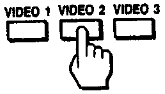
Watching a Window Picture (continued)

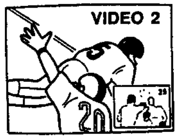
To display VIDEO input picture in a window
You can watch VIDEO input picture (either playback picture or TV program from VCR tuner) using picture-in-picture.
If you want to control your VCR with the supplied Remote Commander.

1 Press PIP.

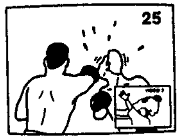


2 Press VIDEO 1, 2, or 3 to select the desired input mode.
You can only change the VIDEO input mode in the main picture.





3 Press SWAP so that the VIDEO input picture becomes a window picture.

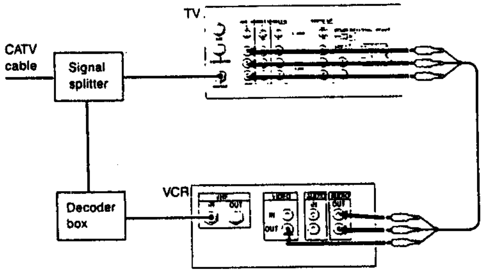


To change the VIDEO input mode, press SWAP again to swap with the main picture.

To display pay cable TV in a window

If you use a cable converter box, make proper connection for using picture-in-picture first.

Connection



Operation
Steps 1 – 3: same as in "To display VIDEO input picture in a window".

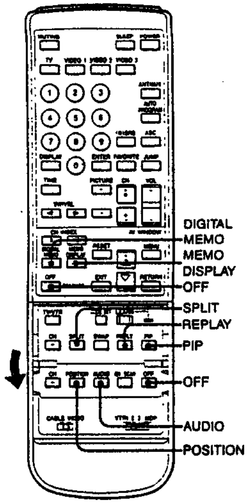
4 Put your VCR on an inactive channel (3CH or 4CH).

5 Change pay cable TV channels with the decoder box.

Notes

If you want to control your VCR or decoder box with the supplied Remote Commander

If you connect your decoder box to the AUX terminal
You can watch the SPLIT and REPLAY picture only.


DIGITAL
MEMO
MEMO
DISPLAY
OFF
SPLIT
REPLAY
PIP
OFF
AUDIO
POSITION

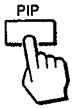
Note

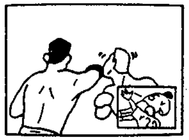
On replay picture
The replay picture is always displayed in 1/9 size.

Advanced Operation of a Window Picture

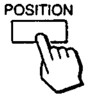
To change the position of a window picture

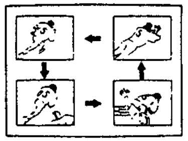
1 Press PIP.





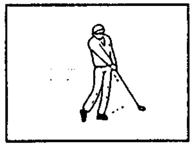
2 Press POSITION.
Each time you press POSITION, the window picture will move as illustrated.

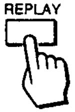


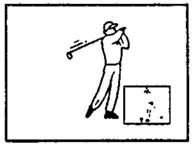


To replay the main picture displayed 2 seconds before in the window picture

Press REPLAY.





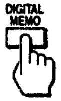


To make the replay picture disappear, press OFF.

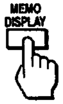
To store a TV picture

You can store a desired picture in the memory of this TV. You can recall the stored picture.
Storing the picture is convenient when you want to write down a recipe of a cooking program or a displayed toll free number, etc.

Press DIGITAL MEMO.
The TV picture will be stored.

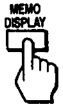

DIGITAL
MEMO

To restore the normal picture
Press MEMO DISPLAY.


MEMO
DISPLAY

When you press MEMO DISPLAY, the screen changes from the stored picture to the normal picture.

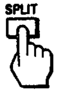
To recall the stored picture
Press MEMO DISPLAY again.

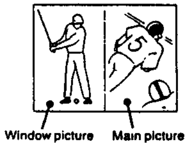

MEMO
DISPLAY

The memory of the stored picture is kept except for the following cases:
— when the TV is turned off.
— when another picture-in-picture function is used.
— when you press OFF twice.

To split the screen between the main picture and the window picture

Press SPLIT.



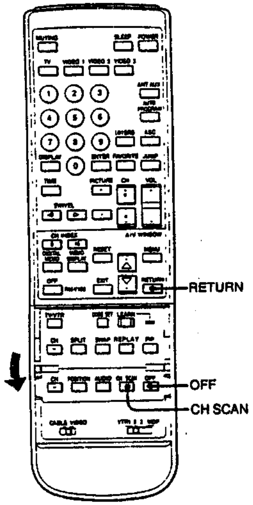

Window picture
Main picture

Notes

To make the window picture disappear
Press OFF.

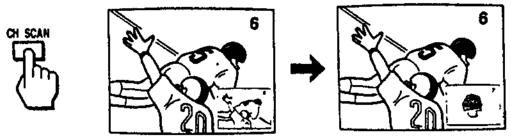
To hear the sound for the window picture
Press AUDIO.

When using the split-screen feature
Vertical lines may appear to you to be elongated.



Scanning Other Channels

Press CH (channel) SCAN.

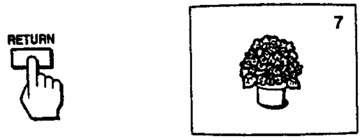


Each channel appears in the window picture for 3 seconds sequentially.

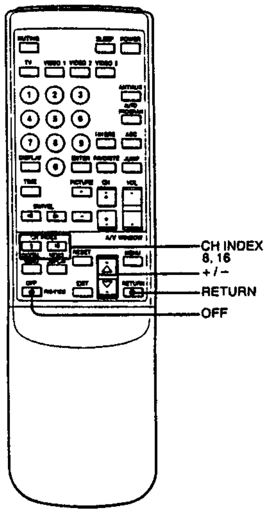
To watch the channel in the window picture continuously.

Press RETURN while the desired channel is in the window picture.

Press RETURN.



To cancel CHANNEL SCAN
Press OFF.



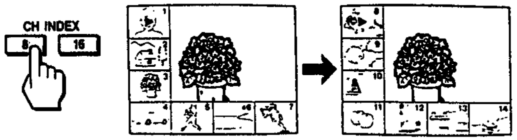
Note

When you use the CH INDEX 8 function, part of the main picture is covered by the window pictures.

Watching Several Window Pictures Simultaneously

To display 8 different channels
(the main picture and 7 window pictures)

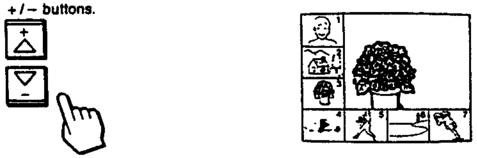
Press CH INDEX 8.



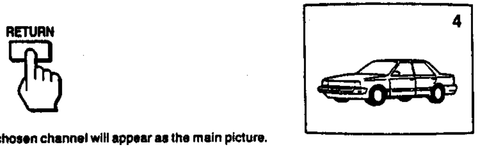
Programs of seven TV channels appear in numerical sequence as window pictures.
Each time you press CH INDEX 8, the next seven sequential channels will appear.

To watch one of the window pictures

1 Position ▷ in the window screen of the desired channel by pressing the +/– buttons.

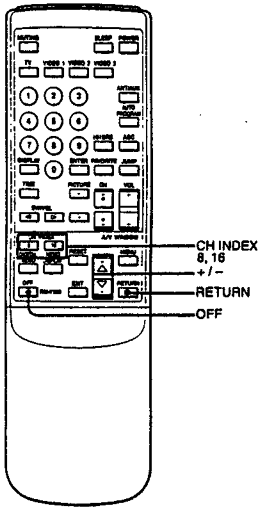


2 Press RETURN.



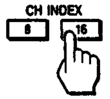
The chosen channel will appear as the main picture.

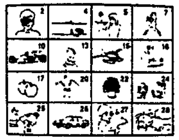
To cancel CH INDEX 8, press OFF.


CH INDEX
8, 16
+/−
RETURN
OFF

To display 16 different channels as window pictures

Press CH INDEX 16.

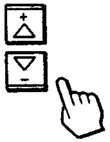

CH INDEX
8
16

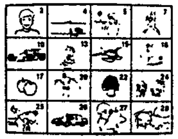

2
4
5
7
10
13
15
16
17
20
22
24
25
26
27
28

Programs of 16 different TV channels appear in numerical sequence as window pictures. Each time you press CH INDEX 16, the next 16 channels will appear.

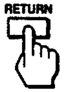
To watch one of the window pictures

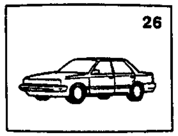
1 Position ▷ in the window screen of the desired channel by pressing the +/− buttons.




2
4
5
7
10
13
15
16
17
20
22
24
25
26
27
28

2 Press RETURN.

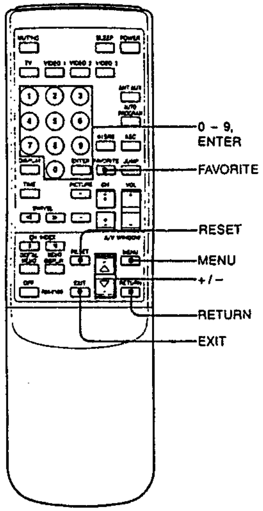




The chosen channel will appear.

To cancel CH INDEX 16, press OFF.

1-6. SETTING UP ON THE SCREEN


0 – 9,
ENTER
FAVORITE
RESET
MENU
+/−
RETURN
EXIT

Note

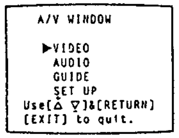
When the memory is full, the indication "The memory is full, sorry" appears.
In this case, clear the unnecessary settings.

Captioning the TV Stations

You can assign a station name using up to four characters to up to 32 program positions to identify the received channel for display on the screen together with the program position number.

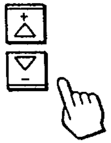
Example: To assign "ABC" to channel 15.

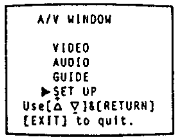
1 Press MENU.



```
      A/V WINDOW

     ▶VIDEO
      AUDIO
      GUIDE
      SET UP
Use[△ ▽]&[RETURN]
[EXIT] to quit.
```

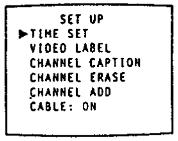
2 Press +/− until ▷ points to "SET UP".





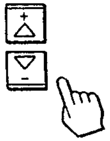
```
      A/V WINDOW

      VIDEO
      AUDIO
      GUIDE
     ▶SET UP
Use[△ ▽]&[RETURN]
[EXIT] to quit.
```

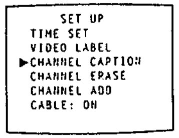
3 Press RETURN.



```
      SET UP
▶TIME SET
 VIDEO LABEL
 CHANNEL CAPTION
 CHANNEL ERASE
 CHANNEL ADD
 CABLE: ON
```

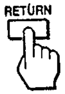
4 Press +/− until ▷ points to "CHANNEL CAPTION".

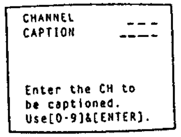




```
      SET UP
 TIME SET
 VIDEO LABEL
▶CHANNEL CAPTION
 CHANNEL ERASE
 CHANNEL ADD
 CABLE: ON
```

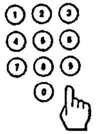
5 Press RETURN.

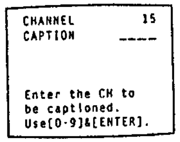




```
CHANNEL        ---
CAPTION       ----


Enter the CH to
be captioned.
Use[0-9]&[ENTER].
```

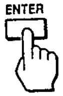
6 Press 0 – 9 to set the channel to be captioned.
(For 15, press 1, then 5.)

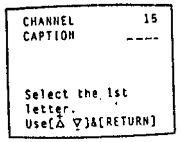




```
CHANNEL         15
CAPTION       ----


Enter the CH to
be captioned.
Use[0-9]&[ENTER].
```

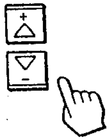
7 Press ENTER.

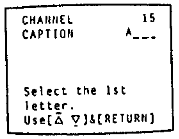




```
CHANNEL         15
CAPTION       ----


Select the 1st
letter.
Use[△ ▽]&[RETURN]
```

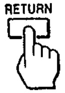
8 Press + / – until the letter or number you want appears.

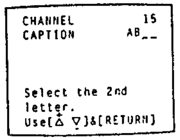




```
CHANNEL         15
CAPTION       A___


Select the 1st
letter.
Use[△ ▽]&[RETURN]
```

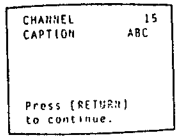
9 Press RETURN.





```
CHANNEL         15
CAPTION       AB__


Select the 2nd
letter.
Use[△ ▽]&[RETURN]
```

10 Repeat steps 8 and 9 for selecting other letters.
(For "ABC", select "B", "C", then select blank.)
Now the CHANNEL CAPTION is set.
If you want to caption more stations, press RETURN.

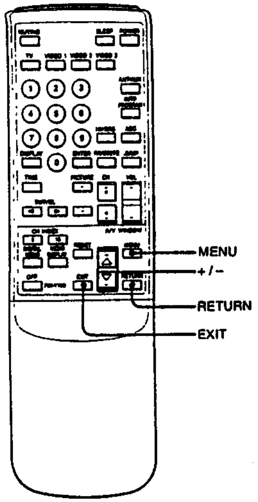


```
CHANNEL         15
CAPTION        ABC



Press [RETURN]
to continue.
```

Notes

To restore the normal picture
Press EXIT.

To clear the setting
Display the "CHANNEL CAPTION" page and press RESET, then EXIT.



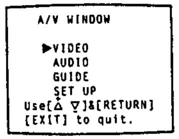
Labeling Each Video Input Mode

You can label each input mode as VTR, S VIDEO, or LD to easily identify what equipment is connected to which input terminal.

When you enter the label, the TV automatically adjusts itself internally to enhance the picture quality for the labeled equipment.

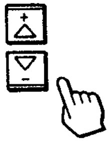
Example: Label VIDEO 1 with S VIDEO.

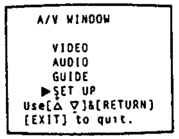
1 Press MENU



```
      A/V WINDOW

     ▶VIDEO
      AUDIO
      GUIDE
      SET UP
Use[△ ▽]&[RETURN]
[EXIT] to quit.
```

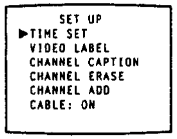
2 Press +/− until ▷ points to "SET UP".





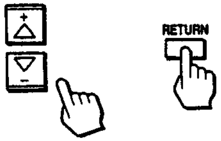
```
      A/V WINDOW

      VIDEO
      AUDIO
      GUIDE
     ▶SET UP
Use[△ ▽]&[RETURN]
[EXIT] to quit.
```

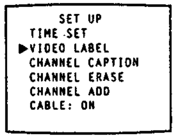
3 Press RETURN.



```
       SET UP
 ▶TIME SET
  VIDEO LABEL
  CHANNEL CAPTION
  CHANNEL ERASE
  CHANNEL ADD
  CABLE: ON
```

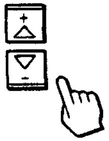
4 Press +/− until ▷ points to "VIDEO LABEL", then RETURN.

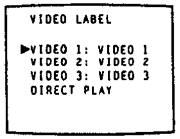




```
       SET UP
  TIME SET
 ▶VIDEO LABEL
  CHANNEL CAPTION
  CHANNEL ERASE
  CHANNEL ADD
  CABLE: ON
```

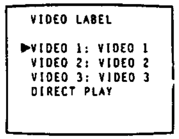
5 Press +/− until ▷ points to your desired input terminal.





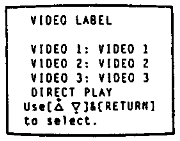
```
  VIDEO LABEL

▶VIDEO 1: VIDEO 1
 VIDEO 2: VIDEO 2
 VIDEO 3: VIDEO 3
 DIRECT PLAY
```

6 Press RETURN.



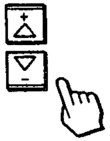
```
  VIDEO LABEL

▶VIDEO 1: VIDEO 1
 VIDEO 2: VIDEO 2
 VIDEO 3: VIDEO 3
 DIRECT PLAY
```

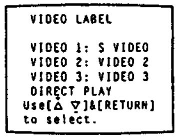
7 Press RETURN.
Then "VIDEO 1" on the right turns red.



```
  VIDEO LABEL

 VIDEO 1: VIDEO 1
 VIDEO 2: VIDEO 2
 VIDEO 3: VIDEO 3
 DIRECT PLAY
Use[△ ▽]&[RETURN]
to select.
```

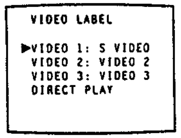
8 Press +/− until the label you want appears.





```
  VIDEO LABEL

 VIDEO 1: S VIDEO
 VIDEO 2: VIDEO 2
 VIDEO 3: VIDEO 3
 DIRECT PLAY
Use[△ ▽]&[RETURN]
to select.
```

9 Press RETURN.

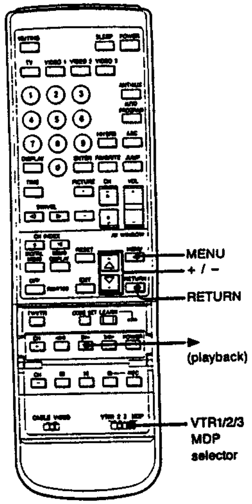


```
  VIDEO LABEL

▶VIDEO 1: S VIDEO
 VIDEO 2: VIDEO 2
 VIDEO 3: VIDEO 3
 DIRECT PLAY
```

If you want to label VIDEO 2 or 3, repeat steps 5–9.
Now, VIDEO LABEL is set.

Note

To restore the normal picture
Press EXIT.

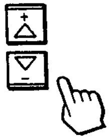


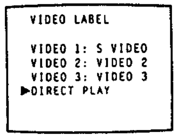
Direct Play Function

With this function, you can change the input mode from TV to VCR by pressing the ▶ (playback) button on the supplied Remote Commander.
Example: When you connect your VCR to the VIDEO 1 IN jacks and control the VCR when the VTR1/2/3 MDP selector is set to VTR2 on the supplied Remote Commander.
First, the TV needs to memorize the VTR selector position on the Remote Commander which you use to control your VCR.

Stepl-4: Same as in "Labeling Each Video Input Mode".

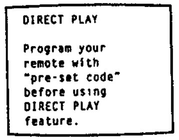
5 Press +/ – until ▹ points to "DIRECT PLAY".





```
 VIDEO LABEL

 VIDEO 1: S VIDEO
 VIDEO 2: VIDEO 2
 VIDEO 3: VIDEO 3
▶DIRECT PLAY
```

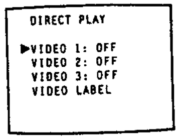
6 Press RETURN.



```
DIRECT PLAY

Program your
remote with
"pre-set code"
before using
DIRECT PLAY
feature.
```

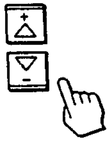
If you have not set the manufacturer's code yet, see page 60 and set it. (When you use Sony video equipment, this setting is not necessary. For details

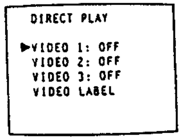
7 Press RETURN



```
 DIRECT PLAY

▶VIDEO 1: OFF
 VIDEO 2: OFF
 VIDEO 3: OFF
 VIDEO LABEL
```

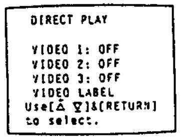
8 Press +/ – until ▹ points to your VCR input.
(If you connected your VCR to VIDEO 1 IN jacks, make ▷point to "VIDEO 1".)





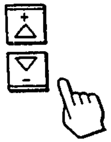
```
 DIRECT PLAY

▶VIDEO 1: OFF
 VIDEO 2: OFF
 VIDEO 3: OFF
 VIDEO LABEL
```

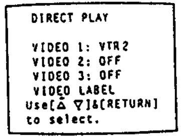
9 Press RETURN.



```
 DIRECT PLAY

 VIDEO 1: OFF
 VIDEO 2: OFF
 VIDEO 3: OFF
 VIDEO LABEL
Use[△ ▽]&[RETURN]
to select.
```

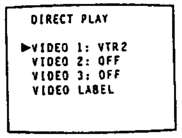
10 Press +/ – until the VTR selector mode that you control your VCR at appears.
(If you control your VCR at VTR 2 in the Remote Commander, make "VTR 2" appear.)





```
 DIRECT PLAY

 VIDEO 1: VTR2
 VIDEO 2: OFF
 VIDEO 3: OFF
 VIDEO LABEL
Use[△ ▽]&[RETURN]
to select.
```

11 Press RETURN.



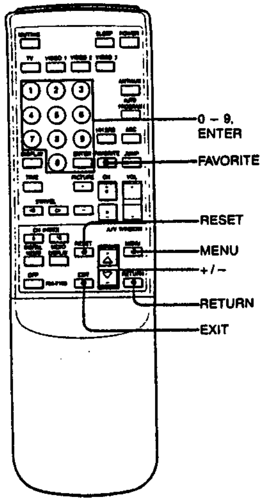
```
 DIRECT PLAY

▶VIDEO 1: VTR2
 VIDEO 2: OFF
 VIDEO 3: OFF
 VIDEO LABEL
```

If you connect other video equipment, repeat steps 8-11.
Now, direct play setting is set.

When you are watching a VCR picture, as you press the ▶ (playback) button, the input mode changes from TV to VCR.
Example: When you set the VTR1/2/3 MDP selector to VTR2 and press ▶, the input mode changes to the VCR that is connected to the VIDEO 1 IN jacks.

Note

To restore the normal picture
Press EXIT.



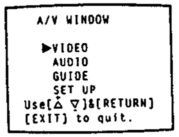
Note
When the memory is full, the indication "The memory is full, sorry" will appears.
In this case, clear the unnecessary settings.

Captioning the TV Stations

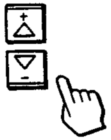
You can assign a station name using up to four characters to up to 32 program positions to identify the received channel for display on the screen together with the program position number.

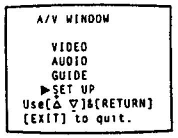
Example: To assign "ABC" to channel 15.

1 Press MENU.

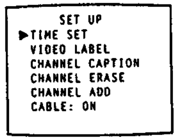

```
A/V WINDOW

 ▶VIDEO
  AUDIO
  GUIDE
  SET UP
Use[△ ▽]&[RETURN]
[EXIT] to quit.
```

2 Press +/– until ▷ points to "SET UP".

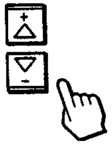


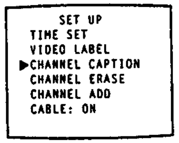

```
A/V WINDOW

  VIDEO
  AUDIO
  GUIDE
 ▶SET UP
Use[△ ▽]&[RETURN]
[EXIT] to quit.
```

3 Press RETURN.

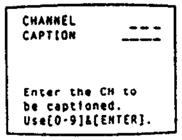

```
     SET UP
▶TIME SET
 VIDEO LABEL
 CHANNEL CAPTION
 CHANNEL ERASE
 CHANNEL ADD
 CABLE: ON
```

4 Press +/– until ▷ points to "CHANNEL CAPTION".

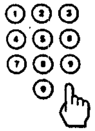


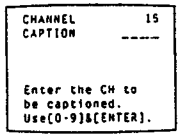

```
     SET UP
 TIME SET
 VIDEO LABEL
▶CHANNEL CAPTION
 CHANNEL ERASE
 CHANNEL ADD
 CABLE: ON
```

5 Press RETURN.

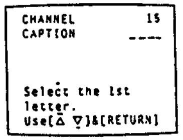

```
CHANNEL         ---
CAPTION        ----


Enter the CH to
be captioned.
Use[0-9]&[ENTER].
```

6 Press 0 – 9 to set the channel to be captioned.
(For 15, press 1, then 5.)

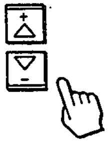


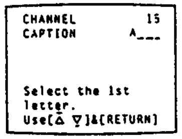

```
CHANNEL          15
CAPTION        ----


Enter the CH to
be captioned.
Use[0-9]&[ENTER].
```

7 Press ENTER.

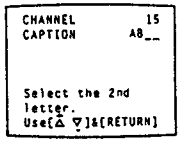

```
CHANNEL          15
CAPTION        ----


Select the 1st
letter.
Use[△ ▽]&[RETURN]
```

8 Press +/– until the letter or number you want appears.

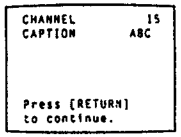



```
CHANNEL          15
CAPTION        A___


Select the 1st
letter.
Use[△ ▽]&[RETURN]
```

9 Press RETURN.


```
CHANNEL          15
CAPTION        AB__


Select the 2nd
letter.
Use[△ ▽]&[RETURN]
```

10 Repeat steps 8 and 9 for selecting other letters.
(For "ABC", select "B", "C", then select blank.)
Now the CHANNEL CAPTION is set.
If you want to caption more stations, press RETURN.

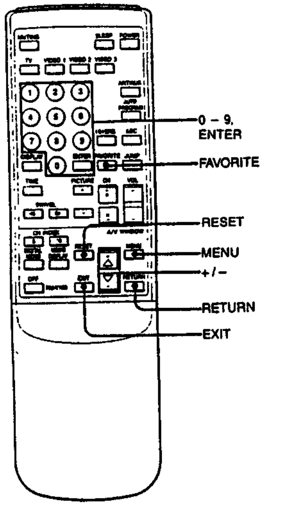

```
CHANNEL          15
CAPTION         ABC



Press [RETURN]
to continue.
```

Notes

To restore the normal picture
Press EXIT.

To clear the setting
Display the "CHANNEL CAPTION" page and press RESET, then EXIT.

1-7. SETTING TIMER-ACTIVATED FUNCTIONS


0 – 9,
ENTER
FAVORITE
RESET
MENU
+ / –
RETURN
EXIT

Notes

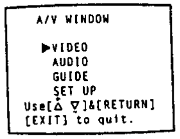
To restore the normal picture
Press EXIT.

To clear the setting
Display the "ON/OFF TIMER" page and press RESET, then EXIT.

Setting the ON/OFF Timer

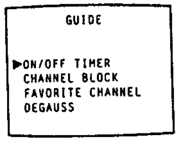
You can make three programs of your choice appear on the screen at the desired time with the ON/OFF timer.
Example: Set the timer to turn on the TV to channel 8 at 1:30 AM for 3 hours every Monday through Friday as PROGRAM 1.

1 Press MENU.



```
   A/V WINDOW

   ▶VIDEO
    AUDIO
    GUIDE
    SET UP
Use[△ ▽]&[RETURN]
[EXIT] to quit.
```

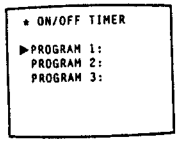
2 Press + / – until ▷ points to "GUIDE", then RETURN.



```
      GUIDE

▶ON/OFF TIMER
 CHANNEL BLOCK
 FAVORITE CHANNEL
 DEGAUSS
```

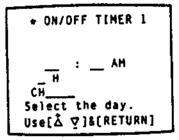
• "DEGAUSS" appears.

3 Make sure ▷ points to "ON/OFF TIMER", then press RETURN.



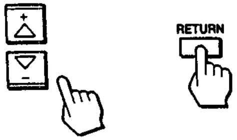
```
 * ON/OFF TIMER

▶PROGRAM 1:
 PROGRAM 2:
 PROGRAM 3:
```

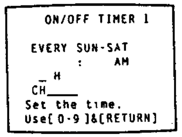
4 Make sure ▷ points to "PROGRAM 1" (for PROGRAM 2 and 3, press + / – to select the desired one), then press RETURN.



```
  * ON/OFF TIMER 1


   __  : __ AM
  _ H
 CH____
Select the day.
Use[△ ▽]&[RETURN]
```

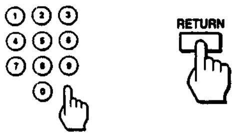
5 Press + / – until the day of the week you want appears, then press RETURN.

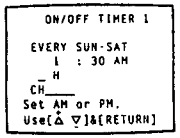




```
  ON/OFF TIMER 1

 EVERY SUN-SAT
      :    AM
 _ H
 CH____
Set the time.
Use[ 0-9 ]&[RETURN]
```

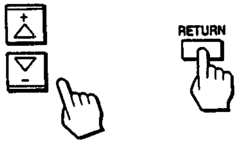
6 Press 0 – 9 to set the time you want, (For 1:30, press 0 1 3 0.) then press RETURN.

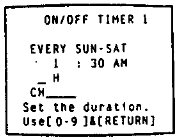

1
2
3
4
5
6
7
8
9
0
RETURN



```
  ON/OFF TIMER 1

 EVERY SUN-SAT
    1  : 30 AM
 _ H
 CH____
Set AM or PM.
Use[△ ▽]&[RETURN]
```

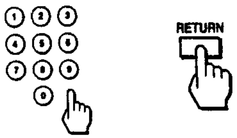
7 Press + / – to set AM or PM, then RETURN.

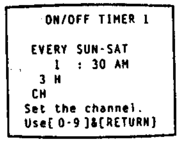




```
  ON/OFF TIMER 1

 EVERY SUN-SAT
   1  : 30 AM
 _ H
 CH____
Set the duration.
Use[ 0-9 ]&[RETURN]
```

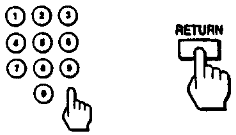
8 Press 1 – 9 to set the duration, then RETURN.

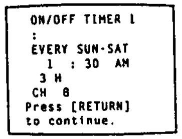

1
2
3
4
5
6
7
8
9
0
RETURN



```
  ON/OFF TIMER 1

 EVERY SUN-SAT
    1  : 30 AM
  3 H
 CH
Set the channel.
Use[ 0-9 ]&[RETURN]
```

9 Press 0 – 9 to set the channel number you want, then RETURN.


1
2
3
4
5
6
7
8
9
0
RETURN

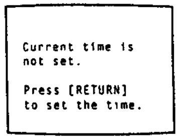


```
 ON/OFF TIMER 1
 :
 EVERY SUN-SAT
   1  : 30  AM
  3 H
 CH  8
Press [RETURN]
to continue.
```

If you want to set program 2 or 3, press RETURN and repeat steps 4 – 9.

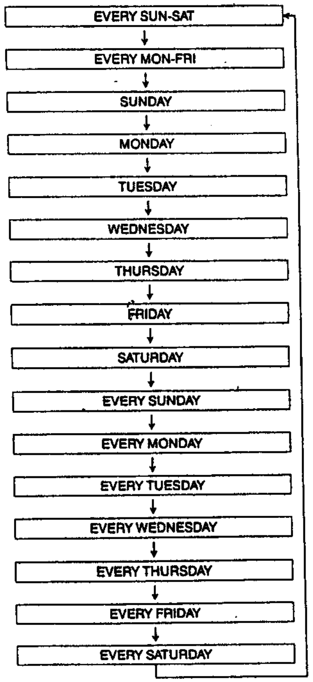
Notes

If you have not set the CURRENT TIME yet
The following message will appear.
Go back to set the clock.

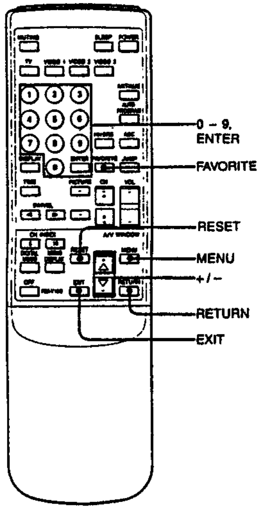


```
Current time is
not set.

Press [RETURN]
to set the time.
```

The selectable days of the week
When you press +, the selectable days of the week will appear in the following order:


EVERY SUN-SAT
EVERY MON-FRI
SUNDAY
MONDAY
TUESDAY
WEDNESDAY
THURSDAY
FRIDAY
SATURDAY
EVERY SUNDAY
EVERY MONDAY
EVERY TUESDAY
EVERY WEDNESDAY
EVERY THURSDAY
EVERY FRIDAY
EVERY SATURDAY

Press – for reverse direction.



Notes

To restore the normal picture
Press EXIT.

To clear the setting
Display the "CHANNEL BLOCK" page and press RESET, then EXIT.

To reset the setting
Display the "CHANNEL BLOCK" page and repeat the steps from the beginning.

Setting the Channel Block

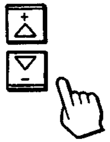
CHANNEL BLOCK prevents a channel from appearing on the screen for preset hours. We suggest you to use this function to prevent children from watching undesirable programs.

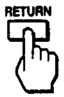
Example: Set the CHANNEL BLOCK at 4:00 PM (for 1 hour), every Saturday, on channel 12.

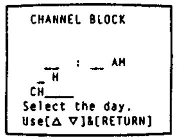
Step 1 – 2: Same as in "Setting the ON/OFF Timer".

---

3 Press + / – until ▷ points to "CHANNEL BLOCK", then RETURN.

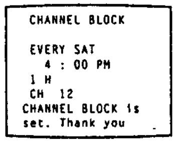






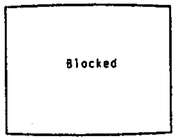
```
CHANNEL BLOCK


 __  :  __ AM
_ H
CH____
Select the day.
Use[△ ▽]&[RETURN]
```

Step 5* – 9: Same as in "Setting the ON/OFF Timer".
*Step 4 is not necessary for the channel block operation.



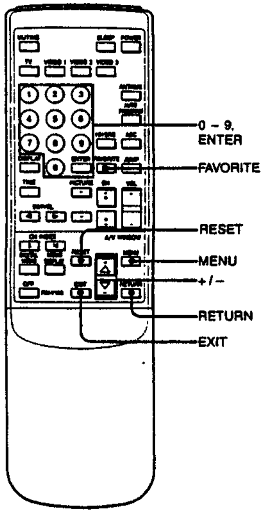
```
CHANNEL BLOCK

EVERY SAT
  4 : 00 PM
1 H
CH  12
CHANNEL BLOCK is
set. Thank you
```

Now CHANNEL BLOCK is set.
The picture of the selected channel will be blocked from viewing and the sound will be muted, at the preset time. A red "Blocked" indication will appear on the screen while the channel is blocked.



```
Blocked
```

1-8. SETTING YOUR FAVORITE CHANNELS

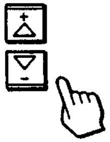


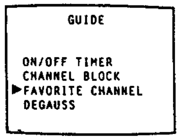
By setting your favorite channels (maximum 5 channels), you will be able to choose them quickly just by pressing the FAVORITE button. First, store your favorite channels.

Step 1 – 2: Same as in "Setting the ON/OFF Timer".

---

3 Press +/– until ▷ points to "FAVORITE CHANNEL".

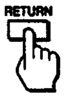


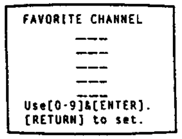


```
      GUIDE


 ON/OFF TIMER
 CHANNEL BLOCK
▶FAVORITE CHANNEL
 DEGAUSS
```

---

4 Press RETURN.

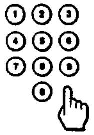


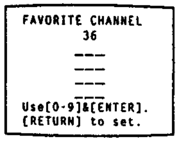


```
FAVORITE CHANNEL
      ---
      ---
      ---
      ---
      ---
Use[0-9]&[ENTER].
[RETURN] to set.
```

---

5 Press 0 – 9 to set the channel number you want.

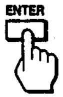


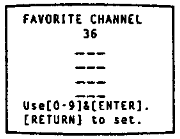


```
FAVORITE CHANNEL
       36
      ---
      ---
      ---
      ---
Use[0-9]&[ENTER].
[RETURN] to set.
```

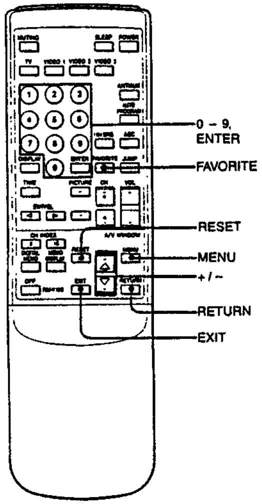
---

6 Press ENTER.





```
FAVORITE CHANNEL
       36
      ---
      ---
      ---
      ---
Use[0-9]&[ENTER].
[RETURN] to set.
```



7 Repeat steps 5 and 6 for the rest of the channels.
If you do not want to store any more channels, you can go to step 8.

```
FAVORITE CHANNEL
      36
      _2
     ---
     ---
     ---
     ---
Use[0-9]&[ENTER].
[RETURN] to set.
```

8 Press RETURN.
Now the FAVORITE CHANNEL is set.

```
FAVORITE CHANNEL
      36
       2
      42
      55
      19
FAVORITE CH is
set. Thank you.
```

After setting your favorite channels
Each time you press FAVORITE, the channels will appear sequentially.

Notes

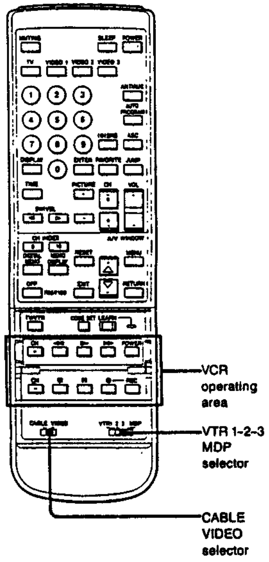
To restore the normal picture
Press EXIT.

To clear the setting
Display the "FAVORITE CHANNEL" page and press RESET, then EXIT.

To reset the setting
Display the "FAVORITE CHANNEL" page and repeat the steps from the beginning.

1-9. USING THE PROGRAMMABLE REMOTE COMMANDER

You can operate other remote controlled video equipment using the supplied RM-Y108 Remote Commander. The supplied Remote Commander is programmed to operate Sony video equipment. In addition, you can reprogram this Remote Commander to operate non-Sony equipment.



Note

After setting other manufacture's code
You cannot operate Sony video equipment with the supplied Remote Commander without setting the Sony.

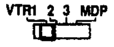
Operating Sony Video Equipment

With the supplied Remote Commander, you can operate Sony video cassette recorders (Beta, 8mm VHS) and video disc players (including multi disc player) without programming.

1 Set the CABLE/VIDEO selector to VIDEO.

CABLE
VIDEO

2 Set the VTR 1/2/3/MDP selector according to the video equipment you want to operate.



If you want to operate A:	then set to
Beta, ED Beta VCR	VTR 1
8mm VCR	VTR 2
VHS VCR	VTR 3
Video disc player	MDP

3 Use the buttons in the video operating area to operate the video equipment.

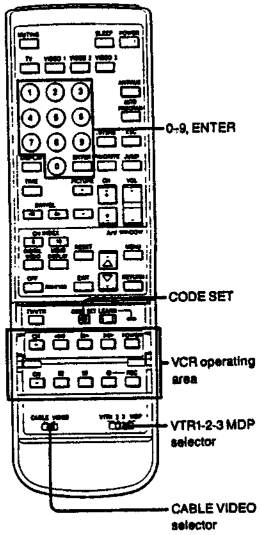
Operating a video cassette recorder

To record	Press ●.
To start playback	Press ▶.
To stop	Press ■.
To advance the tape rapidly	Press ▶▶.
To rewind the tape	Press ◀◀.
To freeze a picture	Press ❚❚. To resume normal playback, press again.
To view the picture at a fast speed to find a particular scene	Keep pressing ▶▶ or ◀◀ during playback. To resume normal playback, release the button.

If the equipment does not have a certain function, the corresponding button on this Remote Commander is not effective.

Operating a video disc player

To start playback	Press ▶.
To stop	Press ■.
To freeze a picture	Press ❚❚. To resume normal playback, press again. This function is effective only for CAV (standard-play disc). With CLV (extended-play disc), the video disc player will go into the standby mode if ❚❚ is pressed.
To view the picture at a fast speed to find a particular scene	Keep pressing ▶▶ or ◀◀ during playback. To resume normal playback, release the button.



Operating Non-Sony or Sony Video Equipment (Pre-programmed Function)

The supplied Remote Commander has pre-programmed functions. Thus you can operate non-Sony video equipment with the supplied Remote Commander by setting the manufacturer's code.

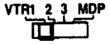
Setting the manufacturer's code

1 Set the CABLE/VIDEO selector to VIDEO.

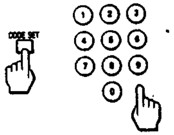
CABLE
VIDEO

2 Set the VTR1/2/3/MDP selector to the position that you want to operate the equipment at.

By employing the VTR 1/2/3 settings, you can use your remote commander to operate up to 3 pieces of equipment.
Note: If you also use Sony video equipment, set other maker's equipment to a position not being used for your Sony video equipment.



3 While pressing CODE SET, press manufacture's code numbers (See table).



4 Press ENTER.

The LEARN indicator turns green and then goes off. (A long beep)
Now you can operate the non-Sony video equipment with the supplied Remote Commander.

5 Use the video operating buttons to operate video equipment.

Manufacturers and their code numbers (video cassette recorder)

Manufacturer	Code number
Sony	01, 02, 03
Canon	05
Emerson	22, 30, 33
Fisher	10, 11, 12, 15
Funai	29
General electoric	05, 08
Goldstar	25
Hitachi	07, 08
JVC	16
Magnavox	05, 06, 09
Mitsubishi	18, 19, 26, 27
Multitech	29
NEC	16, 23, 31
Panasonic	05, 06
Philco	05, 06
Philips	05, 06, 09
Quasar	05, 06
RCA	07, 08
Samsung	24, 32
Sanyo	11, 15
Scott	21
Sharp	13, 14
Shintom	34
Sylvania	05, 06, 09
Symphonic	29
Teknika	28, 29
Toshiba	20, 21
Tote vision	25
Zenith	17

Manufacturers and their code numbers (video disc player)

Manufacturer	Code number
Sony	04
Kenwood	58
Magnavox	52
Maranz	54
Mitsubishi	51
Panasonic	55
Philips	52
Pioneer	51
RCA	51
Sanyo	57
Sharp	56
Yamaha	53

Notes

On the code number

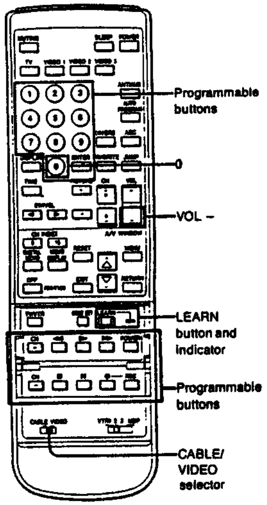
- If more than one code number is listed, try entering them one by one, until you come to the correct code for your equipment.
- If you enter a new code number, the code number previously entered at that setting will be erased.

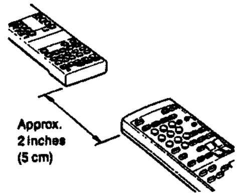
On Sony's code number

The number and operable equipment are as follows:
01 : Beta
02 : 8 mm
03 : VHS
04 : MDP

For your convenience

You can write the operable manufacturer and its code number in the supplied seal and stick it on the rear of the Remote Commander.





Note

For accurate learning
Do not move the remote commanders during the learning process.

Operating non-Sony or Sony Audio and Video Equipment (Learning Function)

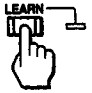
With this feature, you can "teach" any of the programmable buttons to operate one function each of another remote commander. Use the Learning function to program the supplied remote commander to operate non-Sony and Sony audio equipment, your remote controlled cable decoder box, and video equipment of manufacturers not listed in the chart.

1 Set the CABLE/VIDEO selector to CABLE.

CABLE VIDEO

2 Face this Remote Commander with the other remote commander head to head, approximately 2 inches (5 cm) apart.

3 Press LEARN.
The LEARN indicator lights up in green.



4 Momentarily press the button of this Remote Commander on which a function is to be memorized.
The LEARN indicator lights up in red. (A short beep).
Now it's ready for learning.

The Remote Commander beeps repeatedly if there is inappropriate operation. Try again from this step.

5 Keep pressing the function button of the other remote commander until the LEARN indicator turns to green again. (A long beep)
If this does not happen, the learning process has not been completed. Repeat steps 4 and 5.

6 To program other buttons, repeat steps 4 – 5.

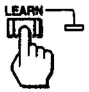
7 Press LEARN.
The LEARN indicator lights up in red, then goes off.
Now the setting is complete.

Clearing memorized functions

1 Set the CABLE/VIDEO selector to CABLE.

CABLE VIDEO

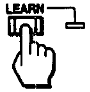
2 Press LEARN.
The LEARN indicator lights up in green.



3 Press VOLUME – .
Keep pressing the VOLUME – button and "0" at once until 6 short beeps are heard.

VOL
+
–
1
2
3
4
5
6
7
8
9
0

4 Press LEARN.
Now all the memorized functions are cleared.



The learning function will not work in the following cases:

Problems:	Solutions:
There is a fluorescent lamp or equipment which emits infrared energy.	Move the remote commanders away from such infrared sources.
The batteries are exhausted.	Replace all the batteries with new ones.
There is an obstacle between the Remote Commanders, or the Remote Commanders are not positioned head to head and exactly aligned.	Position the Remote Commanders properly.

Notes

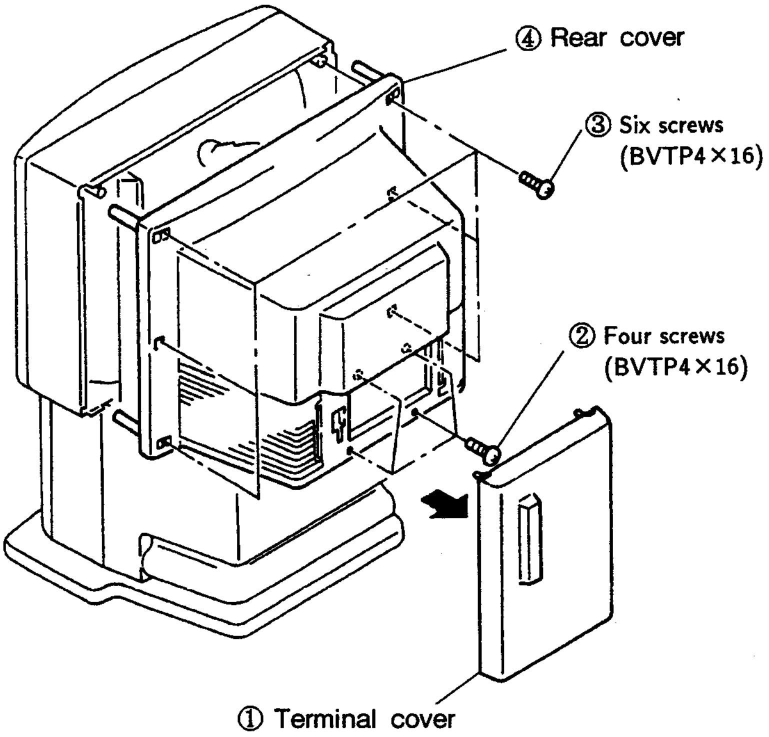
On learning Function
- When you clear the memorized functions, the buttons retain their factory set memory.
- Be sure to confirm that the functions have been memorized as a few commanders of other manufacturers are not compatible with this Remote Commander.
- Do not use the learning function for other than video and audio equipment.
- When operating equipment with learned functions, the selectors should be set to the same position as they were when the functions were memorized.
- When a new function is assigned to a button, the previous function is cleared automatically.
- When the memories are full, the LEARN indicator lights steadily if you try to memorize a new function.
  In such a case, set the USE/LEARN selector to USE to turn the indicator off, then clear the unnecessary functions.

Caution

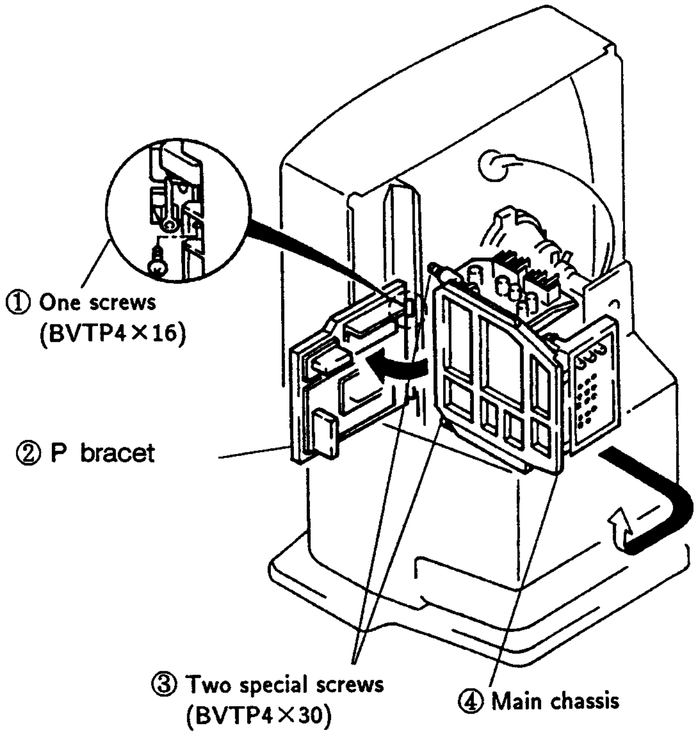
When replacing the batteries, do it within approximately 30 minutes. Otherwise, the memorized functions may be erased.

SECTION 2
DISASSEMBLY

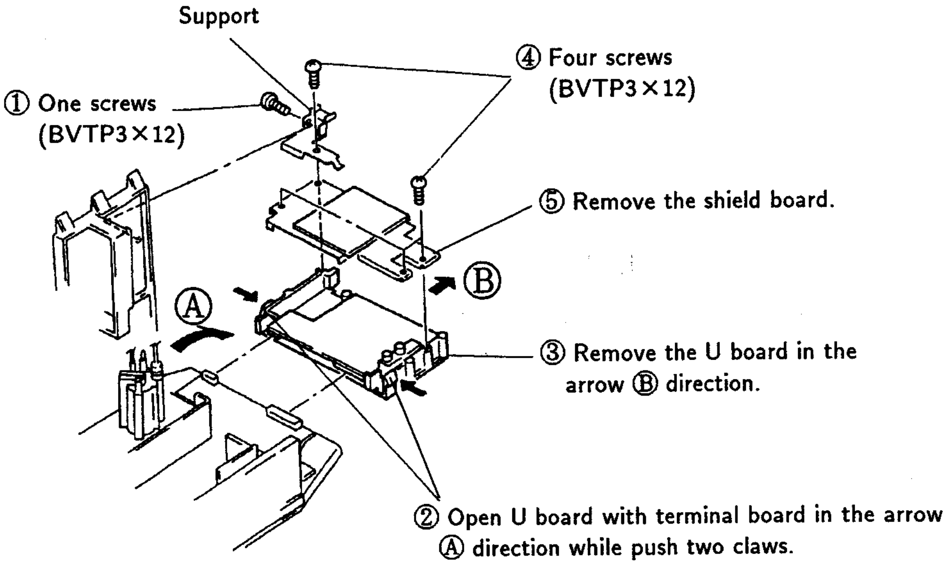
2-1. REAR COVER REMOVAL


④ Rear cover
③ Six screws
(BVTP4×16)
② Four screws
(BVTP4×16)
① Terminal cover

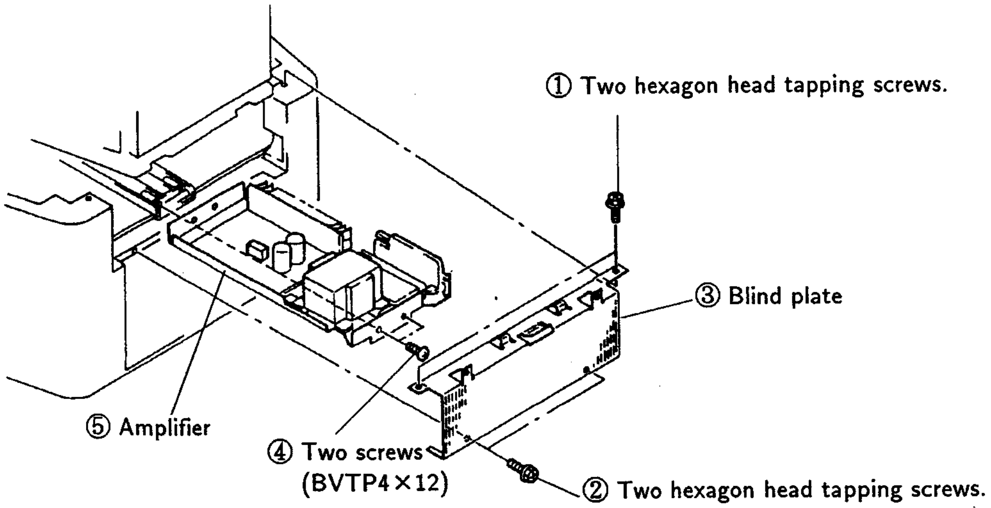
2-2. SERVICE POSITION


① One screws
(BVTP4×16)
② P bracet
③ Two special screws
(BVTP4×30)
④ Main chassis

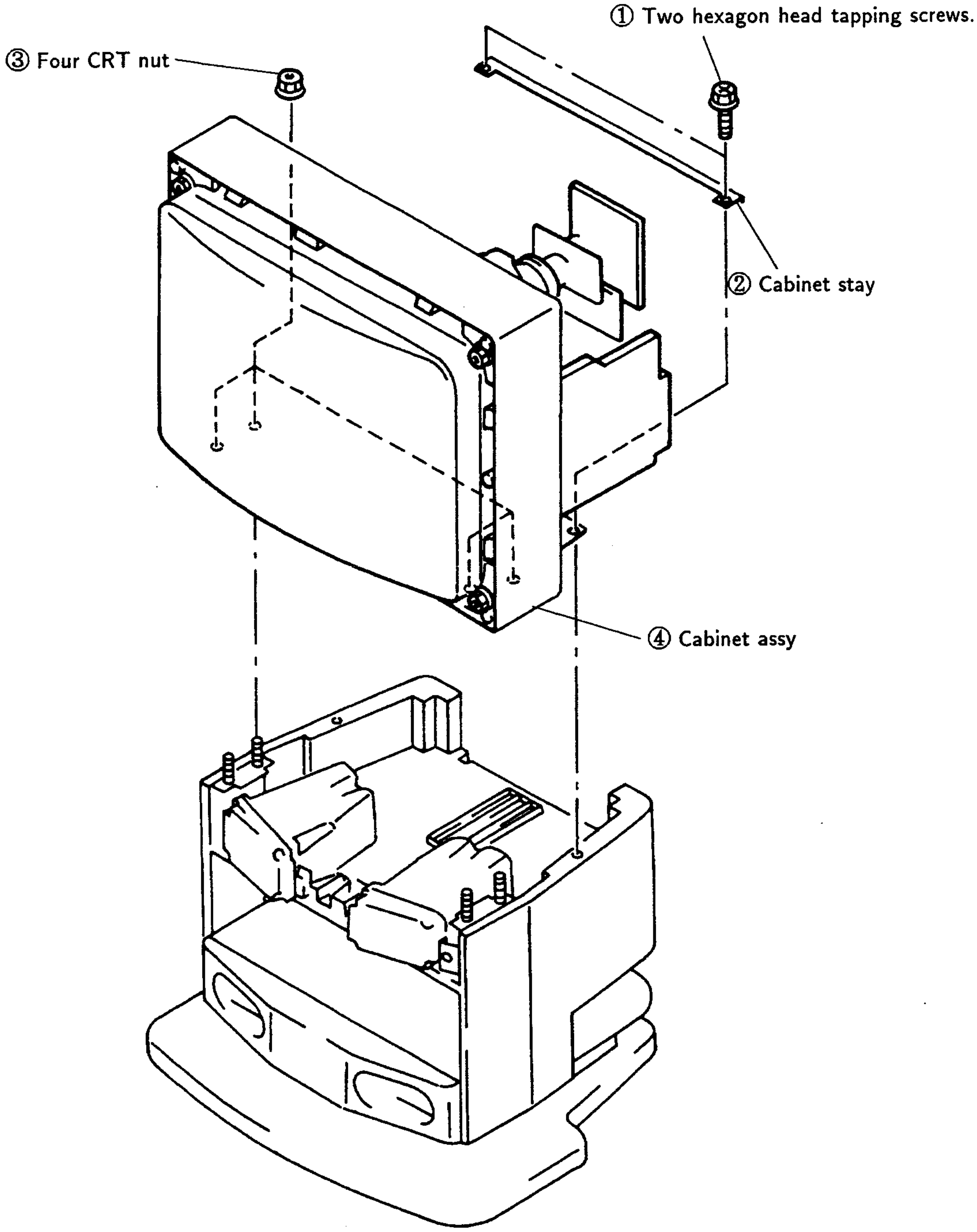
2-3. U BOARD REMOVAL


Support
① One screws
(BVTP3×12)
④ Four screws
(BVTP3×12)
⑤ Remove the shield board.
Ⓐ
Ⓑ
③ Remove the U board in the arrow Ⓑ direction.
② Open U board with terminal board in the arrow Ⓐ direction while push two claws.

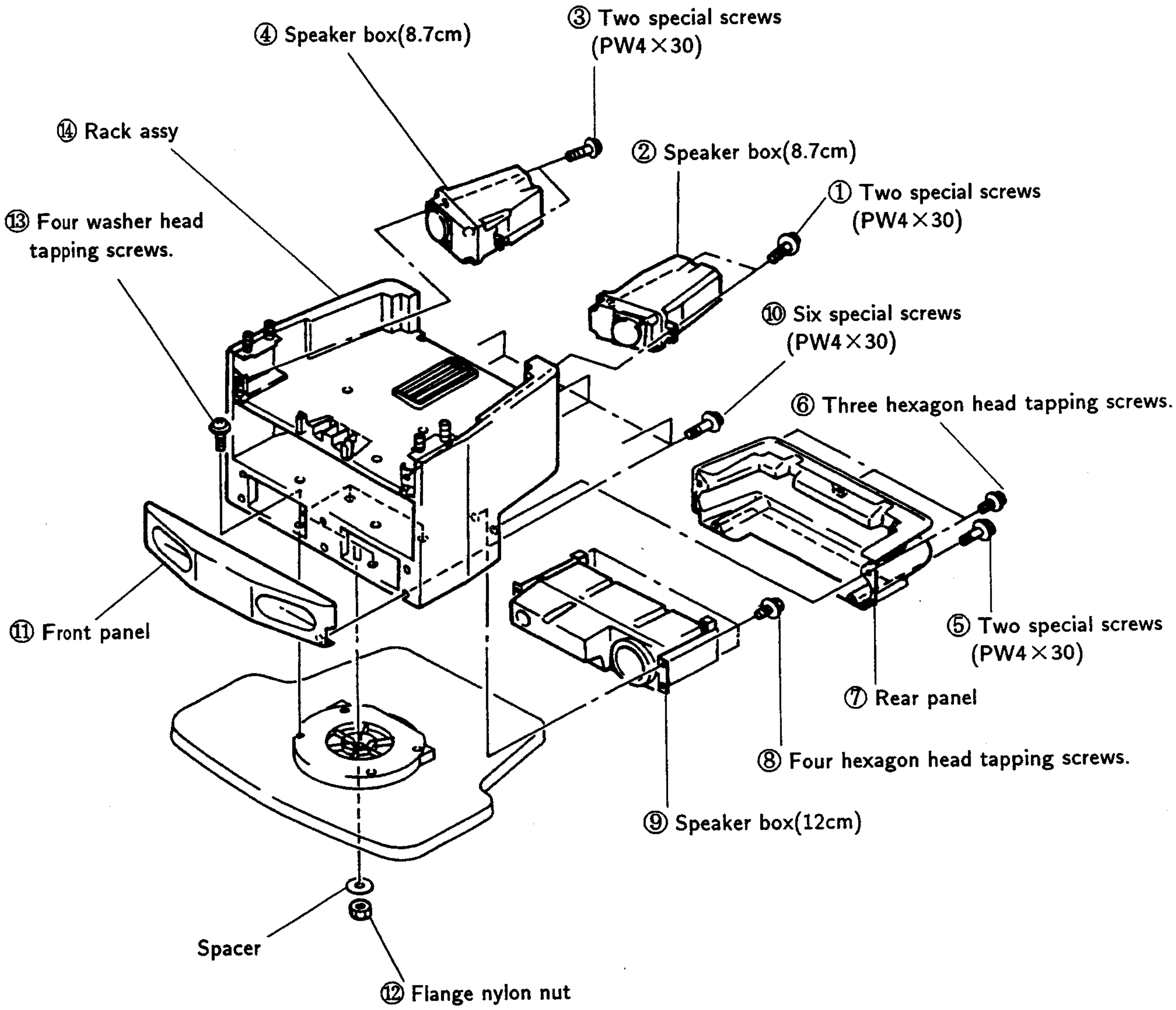
2-4. AMPLIFIER BOARD REMOVAL


① Two hexagon head tapping screws.
③ Blind plate
⑤ Amplifier
④ Two screws
(BVTP4×12)
② Two hexagon head tapping screws.

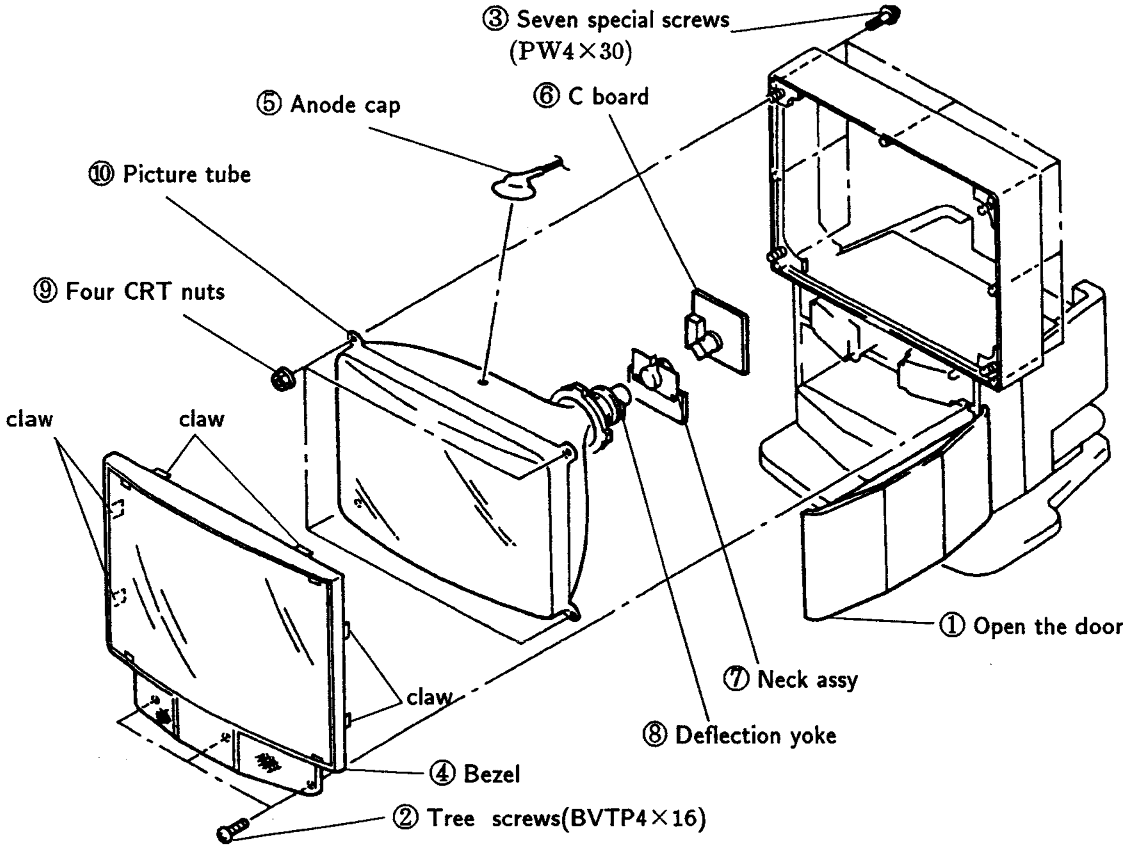
2-5. CABINET ASSY REMOVAL


① Two hexagon head tapping screws.
③ Four CRT nut
② Cabinet stay
④ Cabinet assy

2-6. RACK ASSY REMOVAL


④ Speaker box(8.7cm)
③ Two special screws (PW4×30)
⑭ Rack assy
② Speaker box(8.7cm)
① Two special screws (PW4×30)
⑬ Four washer head tapping screws.
⑩ Six special screws (PW4×30)
⑥ Three hexagon head tapping screws.
⑪ Front panel
⑤ Two special screws (PW4×30)
⑦ Rear panel
⑧ Four hexagon head tapping screws.
⑨ Speaker box(12cm)
Spacer
⑫ Flange nylon nut

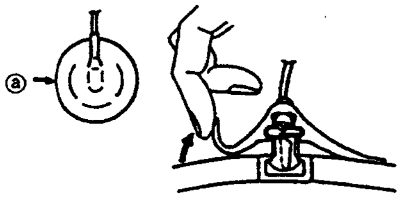
2-7. PICTURE TUBE REMOVAL


③ Seven special screws (PW4×30)
⑤ Anode cap
⑥ C board
⑩ Picture tube
⑨ Four CRT nuts
claw
claw
claw
① Open the door
⑦ Neck assy
⑧ Deflection yoke
④ Bezel
② Tree screws(BVTP4×16)

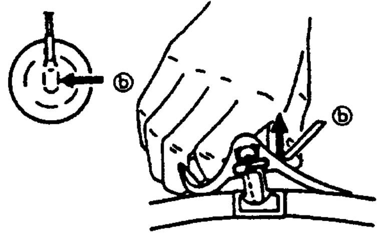
• REMOVAL OF ANODE-CAP

• REMOVING PROCEDURES

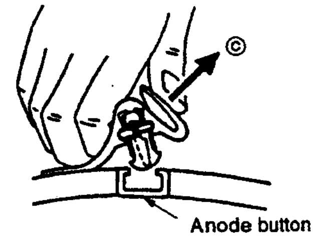
Note : Short circuit the anode of the picture tube and the anode cap to the metal chassis,CRT shield,or carbon painted on the CRT,after removing the anode.



① Turn up one side of the rubber cap in the direction indicated by the arrow ⓐ.



② Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow ⓑ.


ⓒ
Anode button

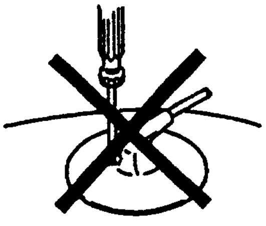
③ When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling up it in the direction of the arrow ⓒ.

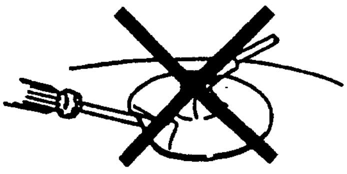
• HOW TO HANDLE AN ANODE-CAP

① Don't hurt the surface of anode-caps with sharp shaped material!

② Don't press the rubber hardly not to hurt inside of anode-caps!
A material fitting called as shatter-hook terminal is built in the rubber.

③ Don't turn the foot of rubber over hardly!
The shatter-hook terminal will stick out or hurt the rubber.





SECTION 3
SET-UP ADJUSTMENTS

- The following adjustments should be made when a complete realignment is required or a new picture tube is installed.
- These adjustments should be performed with rated power supply voltage unless otherwise noted.

The control and switch below should be set as follows unless otherwise noted:

PICTURE control ············ RESET
BRIGHTNESS control ······ RESET

Perform the adjustments in order as follows:

1. Beam Landing
2. Convergence
3. Focus
4. White Balance

Note: Test Equipment Required.

1. Color-bar Pattern Generator
2. Degausser
3. DC Power Supply
4. Digital mulitmeter

Preparation:

- Set the side of the unit with the PICTURE TUBE so that it faces east or west in order to reduce the influence of external magnetic force.
- Position neck assy as shown in Fig.2.

3-1. BEAM LANDING

1. Input a raster signal with the pattern generator.
2. Loosen the deflection yoke mounting screw, and set the purity control to the center as shown in Fig.3.
3. Turn the raster signal of the pattern generator to green.
4. Move the deflection yoke backward, and adjust with the purity control so that green is in the center and red and blue are at the sides evenly. (Fig.4)
5. Move the deflection yoke forward, and adjust so that entire screen becomes green. (Fig.1)
6. Switch over the raster signal to red and blue and confirm the condition.
7. When the position of the deflection yoke is determined, tighten it with the deflection yoke mounting screw.
8. When landing at the corners is not right, adjust by using the disk magnets. (Fig.5)

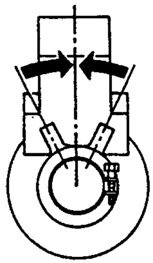

purity control

Fig. 3

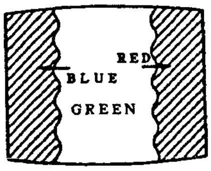

RED
BLUE
GREEN

Fig. 4

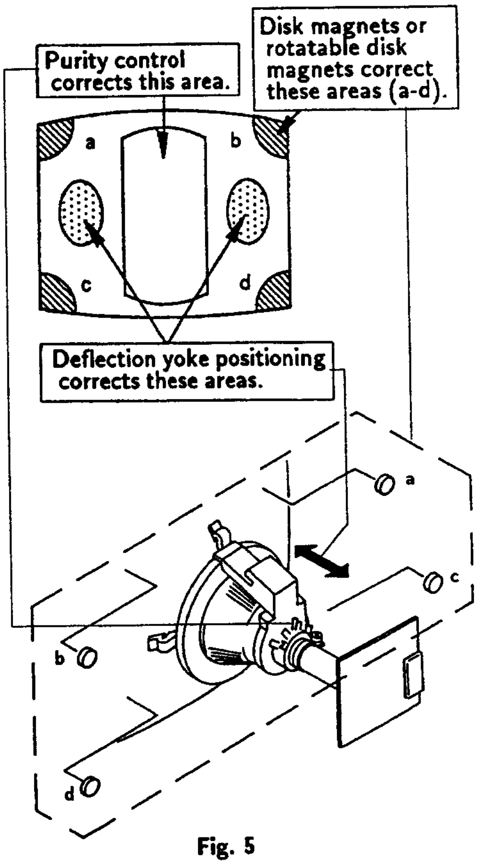

Purity control corrects this area.
Disk magnets or rotatable disk magnets correct these areas (a-d).
a
b
c
d
Deflection yoke positioning corrects these areas.
a
c
b
d

Fig. 5

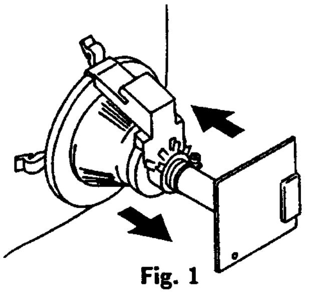


Fig. 1

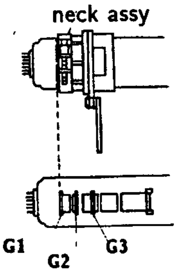

neck assy
G1
G2
G3

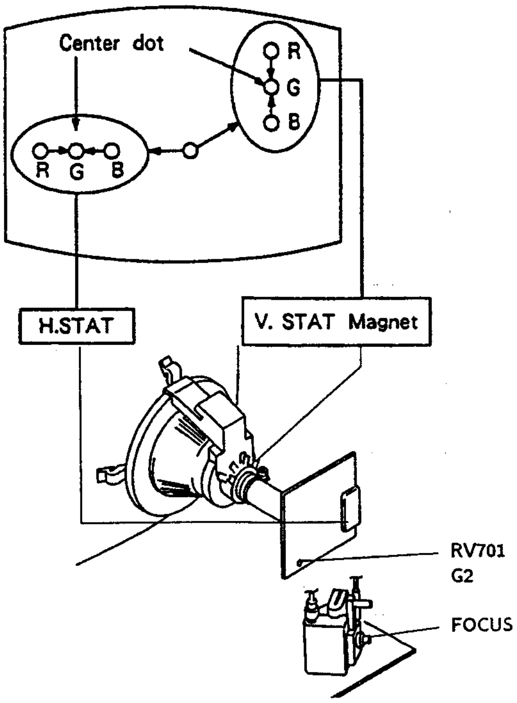
Fig.2

3-2. CONVERGENCE

Preparation

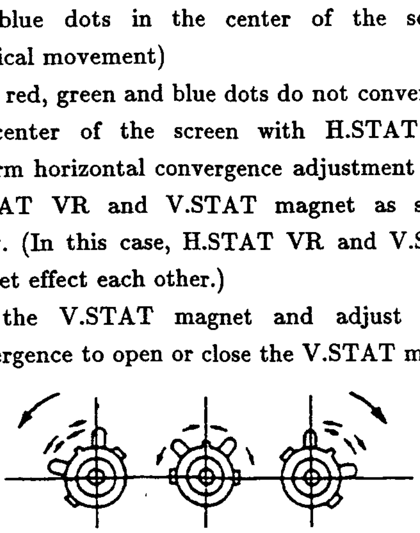
- Before starting, perform FOCUS, H.SIZE, V.LIN and V.SIZE adjustments.
- Set BRIGHTNESS control to minimum.
- Feed in dot pattern and set the PICTURE control to RESET.

(1) Horizontal and Vertical Static Convergence

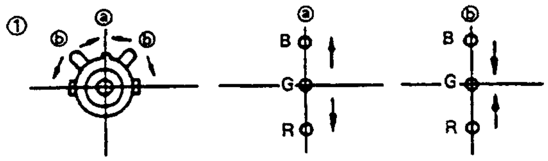


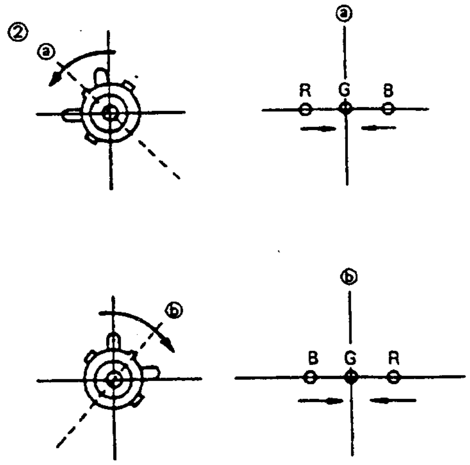
1. Adjust H.STAT VR to converge red, green and blue dots the in center of the screen. (Horizontal movement)
2. Adjust V.STAT magnet to converge red, green and blue dots in the center of the screen. (Vertical movement)
3. If the red, green and blue dots do not converge in the center of the screen with H.STAT VR, perform horizontal convergence adjustment using H.STAT VR and V.STAT magnet as shown below. (In this case, H.STAT VR and V.STAT magnet effect each other.)

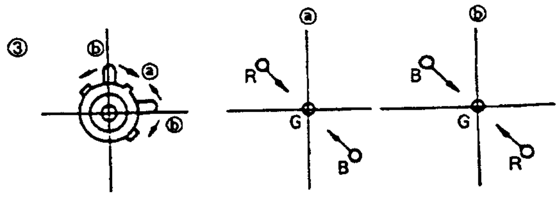
- Tilt the V.STAT magnet and adjust static convergence to open or close the V.STAT magnet.



4. When the V.STAT magnet is moved in the direction of arrow ⓐ and ⓑ, red, green and blue dots move as shown below.





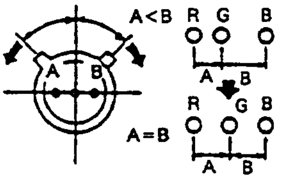


If the blue dot do not converge with red and green dots, perform following steps.

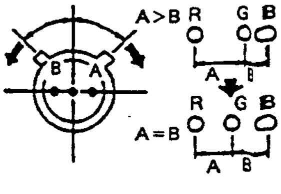
- HMC and VMC correction for BMC (Hexapole) Magnet

1. HMC (Horizontal Mis-convergence) correction and motion of the Electron Beam with the BMC Magnet.

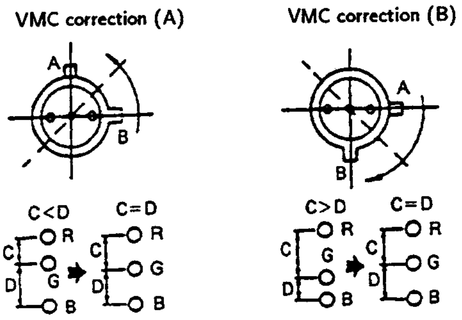
HMC correction (A)

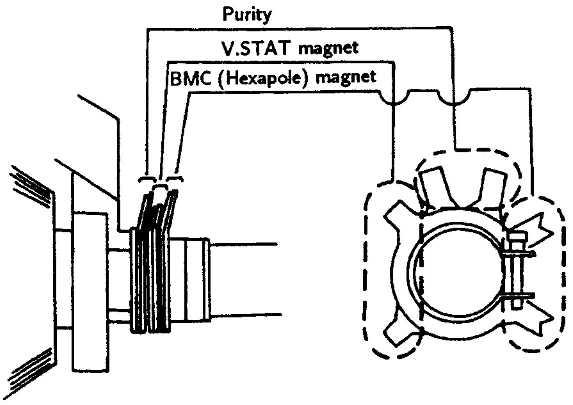


HMC correction (B)



2. VMC (Vertical Mis-convergence) correction and motion of the Electron Beam with the BMC Magnet.


VMC correction (A)
VMC correction (B)
A
B
C<D
C=D
C>D
C
D
R
G
B


Purity
V.STAT magnet
BMC (Hexapole) magnet

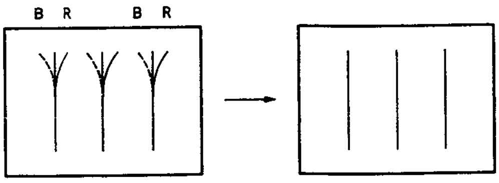
(2) Dynamic Convergence Circuit Adjustment

- Set to Service Mode.
- Input a cross-hatch signal.
- Press 1 and 4 select an item of adjustments.
- Adjust 3 and 6 to the best picture.

ITME	NAME REGSTER	
UYBO	VP	U. YBOW
LYBO	VP	L. YBOW
HAMP	VP	H. AMP
HTILT	VP	H. TILT
UCBO	VP	U. CBOW
UTIL	VP	U. TILT
LCBO	VP	L. CBOW
LTIL	VP	L. TILT
DCSH	VP	DC. SHIFT

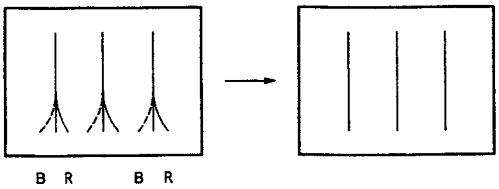
U. YBOW

Select UYBO with 1 and 4



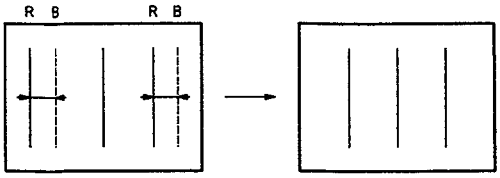
L. YBOW

Select LYBO with 1 and 4



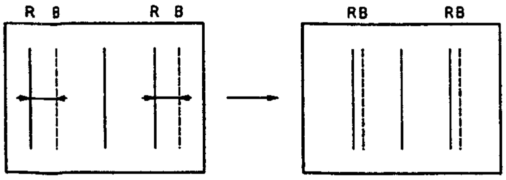
H. AMP

Select HAMP with 1 and 4



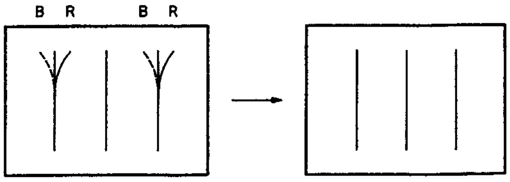
H. TILT

Select HTILT with 1 and 4



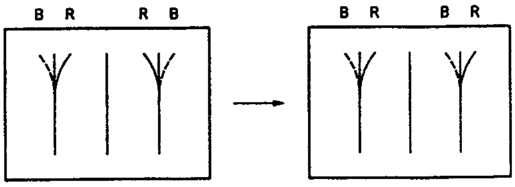
U. CBOW

Select UCBO with 1 and 4



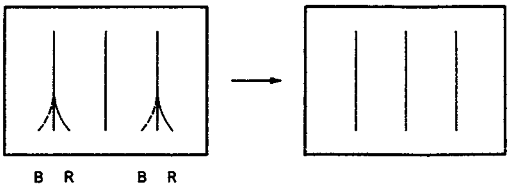
U. TILT

Select UTIL with 1 and 4



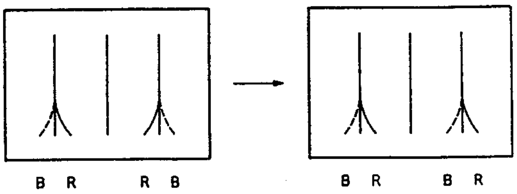
L. CBOW

Select LCBO with 1 and 4



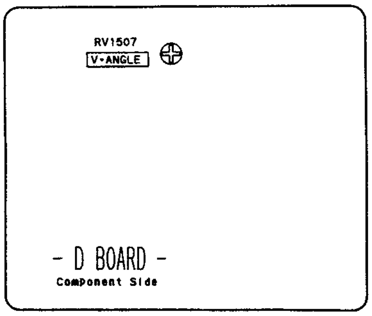
L. TILH

Select L. TIL with 1 and 4



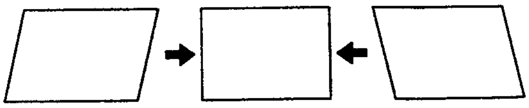
DC. SHIFT

1. Select DCSH with 1 and 4
2. Set the data to "19" with 3 and 6

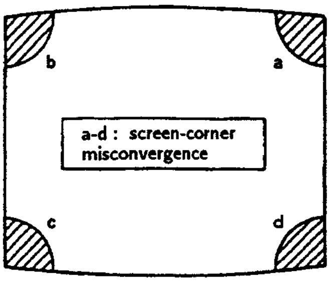

RV1507
V-ANGLE
- D BOARD -
Component Side

V-ANGLE ADJUSTMENT (RV1507)

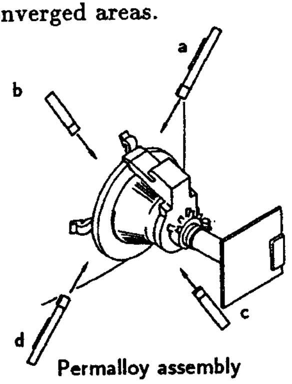
1. Receive cross-hatch signal.
2. Adjust RV1507, so that the central vertical line of screen is straight.



(3) Screen-corner Convergence



Affix a Permalloy ass'y corresponding to the misconverged areas.



3-3. FOCUS

1. Tune in an off-air signal.
2. PICTURE →control to 80%.
3. Adjust the focus VR on A board so that the focus at the center of the screen is optimum.

   (A magenta ring will appear if the focus is adjusted only in the center of the screen. Adjust evenly throughout the entire screen.)

3-4. G2. WHITE BALANCE ADJUSTMENTS

1. G2 (SCREEN) ADJUSTMENT(RV701)

1) Set the PICTURE and BRIGHTNESS to normal.
2) Confirm G1 voltage is within 30.0±5V.
3) Apply DC voltage of 180V to the cathodes of R, G and B from DC stabilized power source.
4) While watching the picture, adjust the G2 control (RV701) to the just the retrace line disappears.

2. WHITE BALANCE ADJUSTMENT

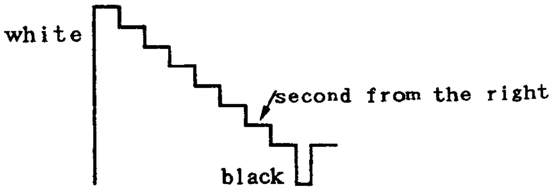
(Using the Remote Commander)

1) Set to service mode.
2) Press VIDEO → RESET to normal and if necessarys "TRINITRON" set to "LOW" by + or − .
3) Input an entire white signal.
4) Set the PICTURE to minimum.
5) Select S BRT with 1 and 4 , and then set the level to minimum with 3 and 6
6) Select G CUT and B CUT with 1 and 4 . And adjust the level with 3 and 6 for the best white balance.
7) Set the PICTURE to maximum.
8) Select G AMP and B AMP with 1 and 4, and adjust the level with 3 and 6 for the best white balance.

3. SUB BRIGHT ADJUSTMENT

(Using the Remote Commander)

1) Set to service mode.
2) Input a staircase signal of black and white from the pattern generator.
3) BRIGHTNESS ··· RESET
   PICTURE ········· minimum
4) Select S BRT with 1 and 4 , and adjust SUB BRIGHT level with 3 and 6 so that the stripe second from the right is dimly lit.



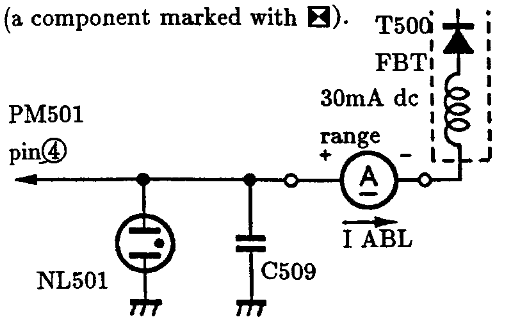
SECTION 4
SAFETY RELATED ADJUSTMENTS

⧗ R549 CONFIRMATION METHOD (HOLD-DOWN CONFIRMATION) AND READJUSTMENTS

The following adjustments should always be performed when replacing the following components (marked with ◪ on the schematic diagram).
IC301,PM501,R549,R564,R509 (A board)

①

1. Preparation before confirmation
   1) Remove R663 on the G board and connect a variable resistor (RV1 : about 10kΩ) between pin ① of IC653 and B+ line.
   2) Supply 120±2.0V AC to with variable autotransformer.
2. Hold-down operation confirmation
   1) Turn the POWER switch ON, and receive entirely white signals and adjust ABL current to 1650 ±20μA with PICTURE and BRIGHT etc controls.
   2) Increase B+ line voltage gradually by adjusting the resistor of RV1. Confirm that the minimum voltage is less than 142.0V DC whereby the raster disappears during operation of hold-down circuit.
      NOTE: When the hold-down circuit starts operating, switch OFF the POWER of the set immediately.
   3) Turn the POWER switch ON, and receive dot signals and adjust ABL current to 150±20μA with PICTURE and BRIGHT etc controls.
   4) Increase B+ line voltage gradually by adjusting the resistor of RV1. Confirm that the minimum voltage is less than 144.5V DC whereby the raster disappears during operation of hold-down circuit.
      NOTE : When the hold-down circuit starts operating, switch OFF the POWER of the set immediately.
3. Hold-down readjustment
   When step 2 is not satisfied, readjustment should be performed by altering the resistance value of R549 (a component marked with ⧗).



⧗ R567 CONFIRMATION METHOD (HOLD-DOWN CONFIRMATION) AND READJUSTMENTS

The following adjustments should always be performed when replacing the following components (marked with ◪ on the schematic diagram).
IC301,IC653,PM501,D539,C556,R509,R556,R564,R567,
R663,T500(A board)

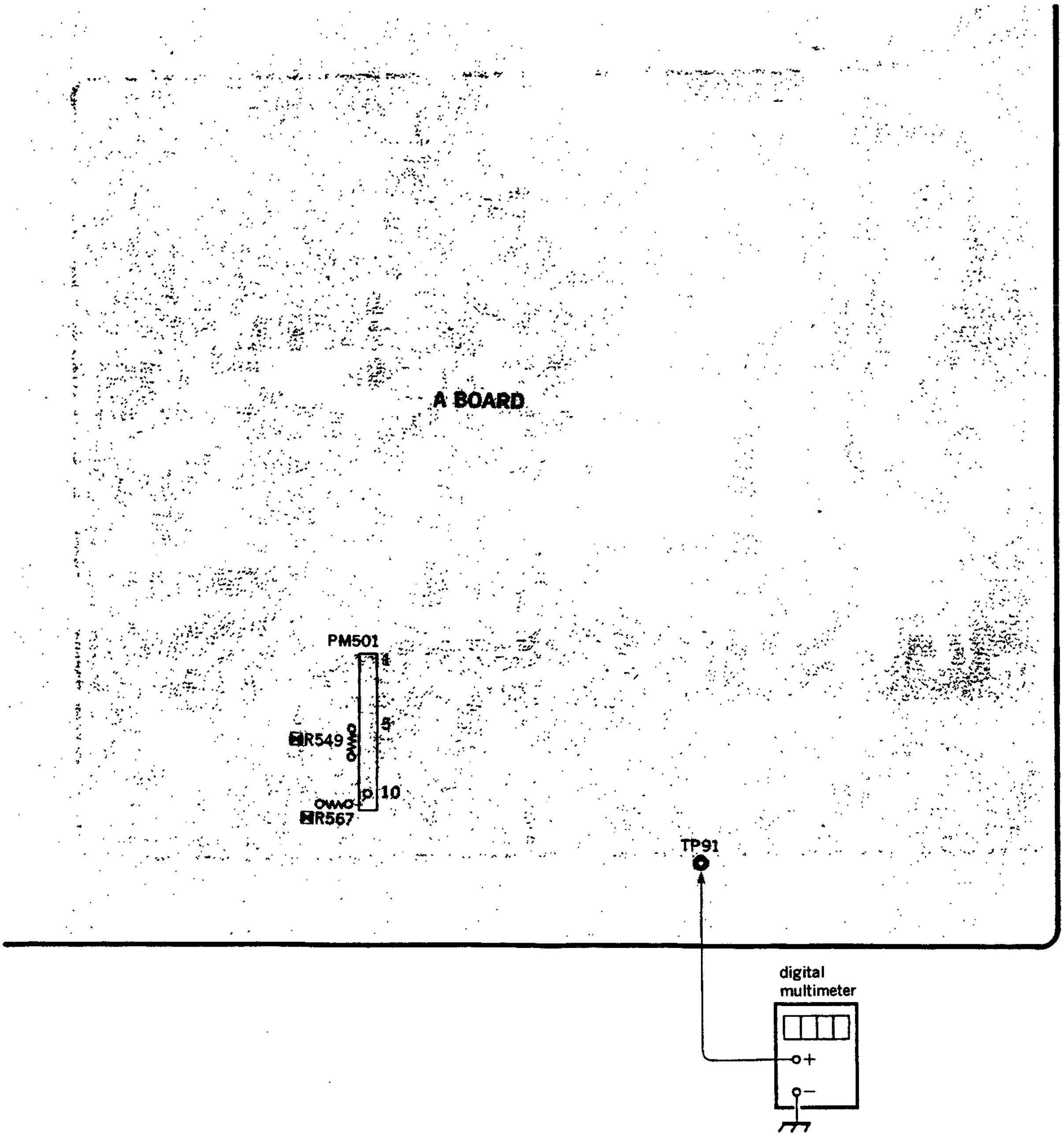
②

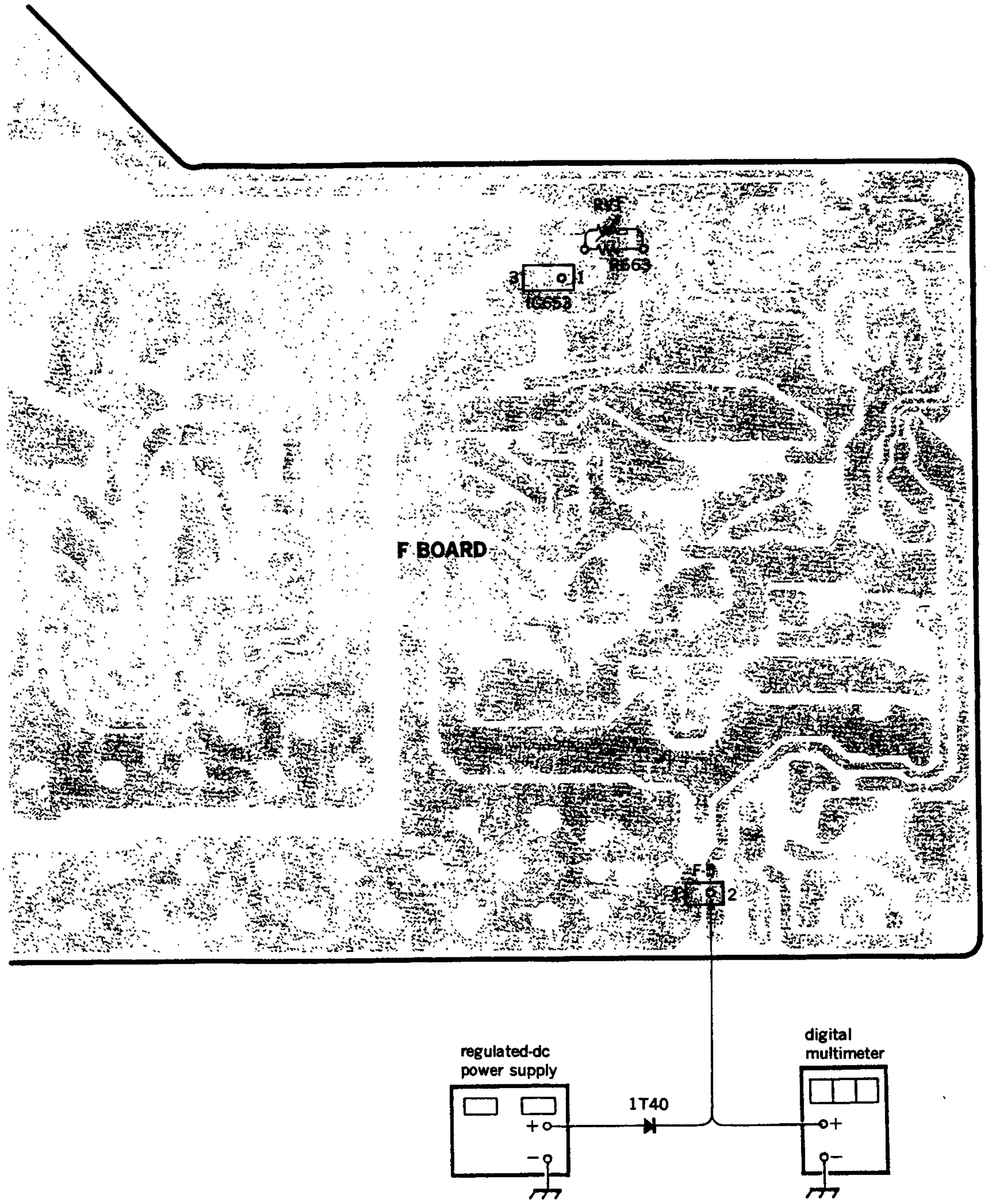
1. Preparation before confirmation
   1) Turn the POWER switch ON, and receive entirely white signals and set the PICTURE and BRIGHT controls to maximum.
   2) Confirm that voltage of the check terminal of TP-PROT is more than 122V DC when the set is operating normally with 120.0±2.0V AC supply.
2. Hold-down operation confirmation
   1) Turn the POWER switch ON, and receive entirely white signals and adjust ABL current to 1650 ±20μA with PICTURE and BRIGHT etc controls.
   2) Apply DC voltage of over 130V DC gradually to the check terminal of TP-PROT via 1T40 from the DC stabilized power source.
      Confirm that the minimum voltage is less than 145.0V DC whereby the raster disappears during operation of hold-down circuit.
      NOTE : When the hold-down circuit starts operating, switch OFF the POWER of the set immediately.
   3) Turn the POWER switch ON, and receive dot signals and adjust ABL current to 150±20μA with PICTURE and BRIGHT etc controls.
   4) Apply DC voltage of over 130V gradually to the check terminal of TP-PROT via 1T40 from the DC stabilized power source.
      Confirm that the minimum voltage is less than 145.0V DC whereby the raster disappears during operation of hold-down circuit.
      NOTE : When the hold-down circuit starts operating, switch OFF the POWER of the set immediately.
3. Hold-down readjustment
   When step 2 is not satisfied, readjustment should be performed by altering the resistance value of R567 (a component marked with ⧗).

B+ VOLTAGE CONFIRMATION

The following adjustments should always be performed when replacing IC653 and R663.

1) Supply $130\pm^{1.0}_{0}$V AC to with variable auto-transformer.
2) Receive entirely monoscope signal.
3) Set the PICTURE control and the BRIGHT controls in to initial reset.
4) Confirm the voltage of TP91 is less than 137.0V DC.
5) If step 4) is not satisfied, replace IC653 and R663 repeat above steps.


A BOARD
PM501
1
5
10
R549
R567
TP91
digital multimeter
+
−


RV1
R663
3
1
IC652
F BOARD
F-5
1
2
regulated-dc power supply
+
−
1T40
digital multimeter
+
−

SECTION 5
CIRCUIT ADJUSTMENTS

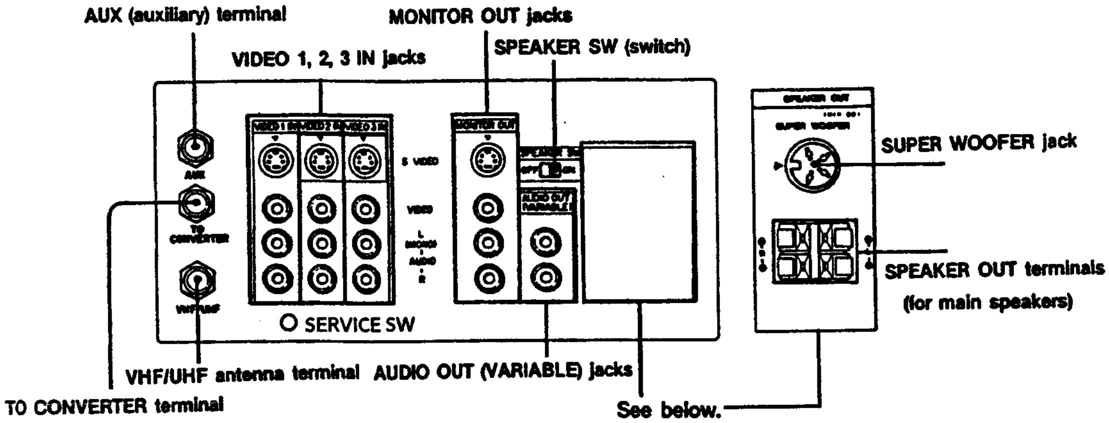
5-1. ELECTRICAL ADJUSTMENT BY REMOTE COMMANDER

Use of Remote Commander (RM-Y106, Y107) can be performed all circuit adjustments about this model.

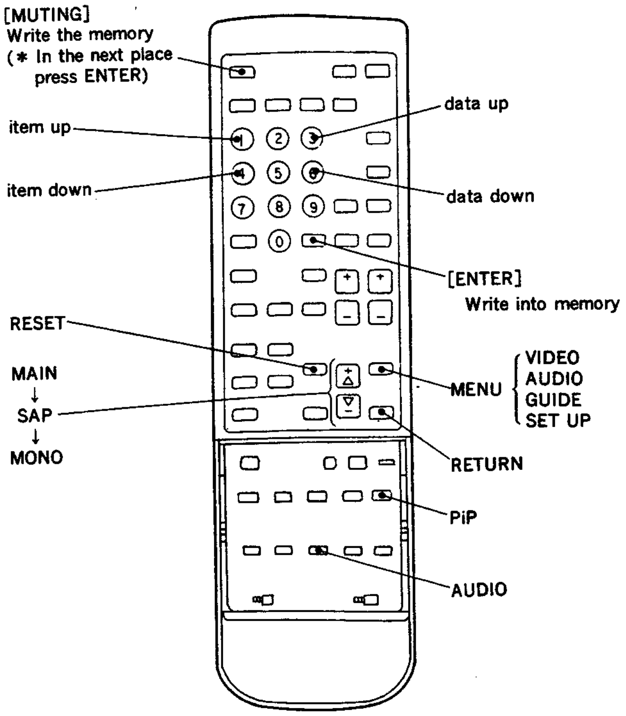
[BASIC ADJUSTMENTS]

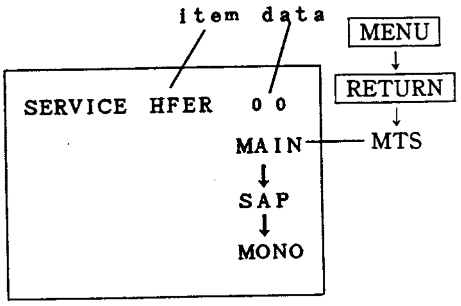
1. METHOD OF SETTING THE SERVICE MODE

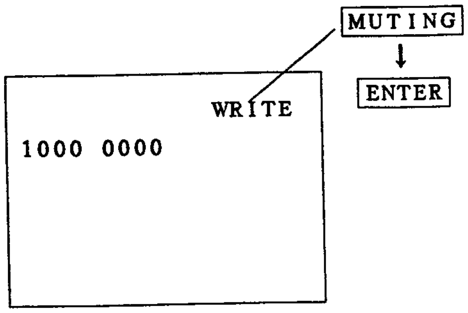
1) Press POWER button on the Remote Commander while pressing switch on the rear of the set.


AUX (auxiliary) terminal
MONITOR OUT jacks
VIDEO 1, 2, 3 IN jacks
SPEAKER SW (switch)
SUPER WOOFER jack
SPEAKER OUT terminals
(for main speakers)
S VIDEO
VIDEO
AUDIO
O SERVICE SW
VHF/UHF antenna terminal
AUDIO OUT (VARIABLE) jacks
TO CONVERTER terminal
See below.

2. ADJUST BUTTONS AND INDICATOR


[MUTING]
Write the memory
(* In the next place press ENTER)
item up
item down
data up
data down
[ENTER]
Write into memory
RESET
MAIN
↓
SAP
↓
MONO
MENU
VIDEO
AUDIO
GUIDE
SET UP
RETURN
PiP
AUDIO


item
data
SERVICE HFER 0 0
MAIN
↓
SAP
↓
MONO
MENU
↓
RETURN
↓
MTS


WRITE
1000 0000
MUTING
↓
ENTER

3. AN ITEM OF ADJUSTMENT

ITEM	NAME REGISTER	
HFRE	VP	H-FREQUENCE 1
VFER	VP	V-FREQUENCE 1
VPOS	VP	V-SHIFT
VSIZ	VP	V-SIZE
VLIN	VP	V-LINEARITY
VSCO	VP	S-CORRECTION
HPOS	VP	H-PHASE
HSIZ	VP	H-SIZE
PAMP	VP	PIN AMP.
CPIN	VP	CORNER PIN
PPHA	VP	PIN PHASE
VCOM	VP	V-COMP
GAMP	VP	GREEN AMP.
BAMP	VP	BLUE AMP.
GCUT	VP	GREEN CUT OFF.
BCUT	VP	BLUE CUTOFF
CROM	VP	CHROMA TRAP
SPIX	VP	PICTURE
SHUE	VP	HUE
SCOL	VP	COLOR
SBRT	VP	BRIGHT
RGBP	VP	RGB PICTURE
MPX	AP	ATT
FILO	AP	I 1
DEEM	AP	I 2
STEV	AP	OSC 1
SAPV	AP	OSC 2
PILO	AP	PILOT
SEP	AP	WIDE BAND
VD	AP	SPECTRAL
LVOL	AP	VOLUME-L
RVOL	AP	VOLUME-R
SHAR	VP	SHARPNESS
DISP	VP	③PWM OUTPUT

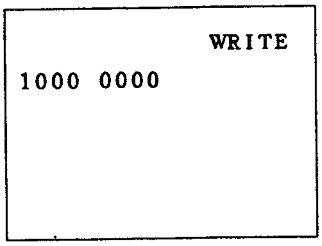
4. METHOD OF CANCELLATION FROM SERVICE MODE

Set the standby condition (Press POWER button on the commander) in the next place, press POWER button again, hereupon it becomes TV mode.

5. METHOD OF WRITE FOR MEMORY

1) Set to Service Mode.
2) Press 1 (UP) and 4 (DOWN), select an item of adjustments.
3) Press MUTING button indicate WRITE (RED) on screen.
4) Press ENTER button to write for memory. (At this time WRITE (YELLOW) is indicated on screen.)

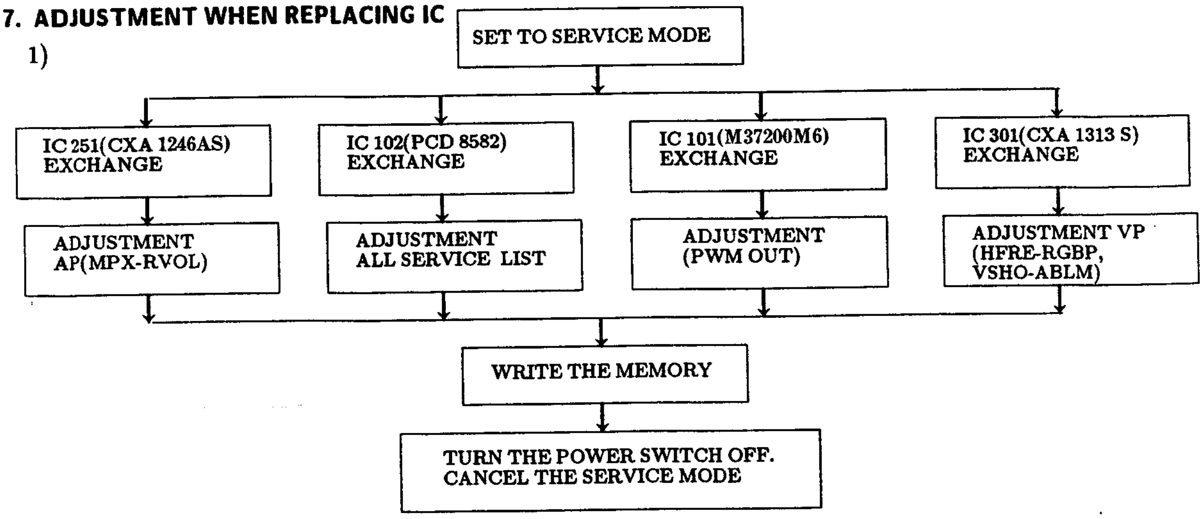
6. MEMORY WRITE CONFIRMATION METHOD


WRITE
1000 0000

1) After adjustment, pull out the plug from AC outlet, and next place, plug in AC outlet again.
2) Turn the power switch ON and set to Service Mode.
3) Call the adjusted items again, confirm they were adjusted.

7. ADJUSTMENT WHEN REPLACING IC

1)


SET TO SERVICE MODE
IC 251(CXA 1246AS) EXCHANGE
IC 102(PCD 8582) EXCHANGE
IC 101(M37200M6) EXCHANGE
IC 301(CXA 1313 S) EXCHANGE
ADJUSTMENT AP(MPX-RVOL)
ADJUSTMENT ALL SERVICE LIST
ADJUSTMENT (PWM OUT)
ADJUSTMENT VP (HFRE-RGBP, VSHO-ABLM)
WRITE THE MEMORY
TURN THE POWER SWITCH OFF. CANCEL THE SERVICE MODE

NOTE : If service mode is canceled before writing into memory, the adjustment data is not recorded.
Please write into memory, after adjustment.

2) The following initial setting should always be performed when replacing the IC 102 (PCD 8582).

ITEM	NAME	REGISTER	ADJUSTMENT
VSOM	VP	VSMO	0
AFC	VP	AFC 1.0	0
REF	VP	REF 1.0	2
ROFF	VP	OFF NR	1
GOFF	VP	OFF NG	1
BOFF	VP	OFF NB	1
ABLM	VP	ABLM	1
TEST	AP	T	0
DRGB	VP	DRGB	1

*Please with the memory each items by pressing MUTING → and then press ENTER.

5-2. CIRCUIT ADJUSTMENT

RF AGC ADJUSTMENT (IF BLOCK VR)

1)Input a color-bar signal.
2) Adjust AGC VR of IF 201 so that snow noise and cross-modulation disappear from the picture.
3) Confirm them at every channel.

H. FREQUENCY ADJUSTMENT (HFRE)

1) Set to Service Mode.
2) Input a color-bar signal.
3) Connect a frequency counter to base of Q 502.
4) Call the item of AFC, set to 3 level (free run).
5) Select HFRE with 1 and 4.
6) Adjut 3 and 6 to the 15.735± 60 Hz level.
7) Call the item of AFC again, adjust the level“ 00 ”.
8) Write into the memory by pressing MUTING → then ENTER.

V. FREQUENCY ADJUSTMENT (VFRE)

1) Set the Service Mode.
2) Receive an off-air signal (VIDEO IN → no signal).
3) Connect the frequency counter across pin ⑥ of A-81 connector and ground.
4) Select VFER with 1 and 4.
5) Adjust 3 and 6 to the 55 ±1 Hz.
6) Write the memory by pressing MUTING → then ENTER

CHROMA TRAP ADJUSTMENT (CROM)

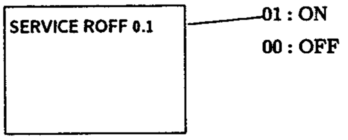
1) Set to Service Mode.
2) Input a color-bar signal.
3) Select NOTCH (VIDEO condition), turn ON by pressing +. And then set the COLOR VR to maximum setting position and SHARPNESS control to center.
4) Connect an oscilloscope to TP47R (R OUT) on C board.
5) Select C ROM with 1 and 4, and then adjust 3.58MHz (CHROMA) ingredient is minimum with 3 and 6.
6) Write into the memory by pressing MUTING → then ENTER.
7) Set NOTCH to OFF, and make normal condition with VIDEO → then RESET.

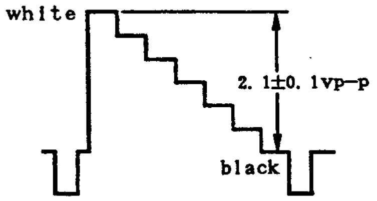
SUB CONTRAST ADJUSTMENT (SPIX)

1) Set to Service Mode.
2) Input a color-bar signal. (75 IRE)
3) Set the conditions as follows.

PICTURE ····· MAX
COLOR ········ MIN
R OFF ·········· ON
G OFF ·········· OFF
B OFF ·········· OFF

Press VIDEO → - (L) (It becomes minimum).
Select 3 (ON) and 6 (OFF) with 1 and 4.



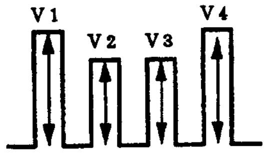


4) Connect an oscilloscope to TP47R (R OUT) on C board.
5) Adjust 3 and 6 to the 2.1 ± 0.1Vp-p level by selecting SPIX with 1 and 4.
6) Write the memory by pressing MUTING → then ENTER.
7) Return the following back to normal after adjustment.

G OFF ·········· ON
B OFF ·········· ON
COLOR ······· CENTER
PICTURE ···· 80%

SUB HUE, SUB COLOR ADJUSTMENT (SHUE, SCOL)

1) Input a color-bar signal.
2) Press VIDEO → then RESET to normal.
3) Set to Service Mode.
4) Connect an oscilloscope to TP47B (B OUT) on C board.
5) Adjust 3 and 4 to the V1=V4 and V2=V3 by select to SHUE and SCOL with 1 and 4.



6) Write into the memory by pressing MUTING → then ENTER.

V. SIZE ADJUSTMENT (VSIZ)

1) Set to Service Mode.
2) Input a cross-hatch signal.
3) Adjust 3 and 6 to the best vertical size by selecting VSIZ with 1 and 4.
4) Write into the memory by pressing MUTING → then ENTER.

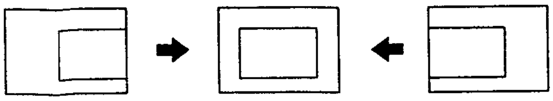
H. SIZE ADJUSTMENT (HSIZ)

1) Input a cross-hatch signal.
2) Press VIDEO → then RESET to normal.
3) Set to Service Mode.
4) Adjust 3 and 6 to best horizontal size by selecting HSIZ with 1 and 4.
5) Write into the memory by pressing MUTING → then ENTER.

H. CENTER ADJUSTMENT (HPOS)

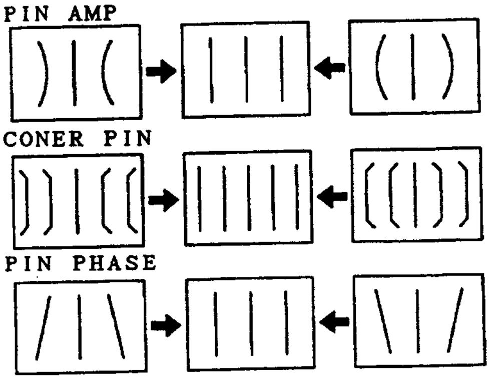
Note : Perform this adjustment after H.FREQ adjustment.

1) Input a cross-hatch signal.
2) Press VIDEO → then RESET to normal.
3) Set to Service Mode.
4) Select HPOS with 1 and 4.
5) Adjust 3 and 6 to the best picture.
6) Write into the memory by pressing MUTING → then ENTER.



PIN AMP, CORNER PIN AND PIN PHASE ADJUSTMENT

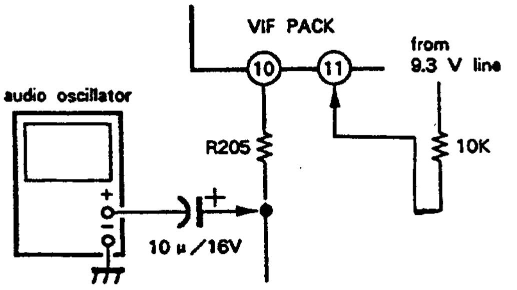
1) Input a coss-hatch signal.
2) Press VIDEO → then RESET to normal.
3) Set to Service Mode.
4) Select PAMP, CPIN and PPHA with 1 and 4.
5) Adjust 3 and 6 to the best picture.



6) Write the memory by MUTING → ENTER.

FILTER ADJUSTMENT (MPX FIOL)

1) Set to Service Mode.
2) Select to TEST with 1 and 4, set the data to "1". Then select MPX and change data to "08" .
3) Connect an audio oscillator to R205 using electrolytic capacitor (10μF/16V), set frequency to 62.936kHz.



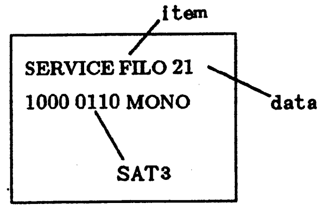
V_{4fH} : SINE-WAVE 62.936 kHz
LEVEL 3.0 Vp-p

4) Make the data "00" by selecting FILO with 1 and 4. And then, send up the data gradually by pressing 6. Set the data to D1 before SAT3 changing to 1 from 0.

5) Send up the data gradually. Set data D2 when SAT3 changes 0 from 1.

6) Adjust the data of FIOL to $\frac{D1+D2}{2}$.

7) Write into the memory by pressing MUTING → then ENTER.



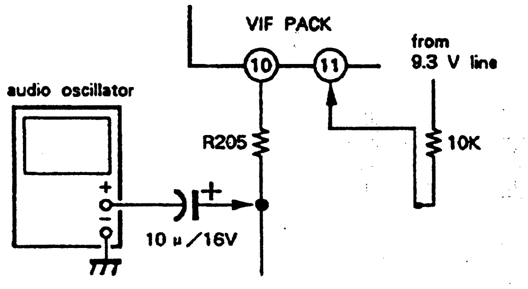
ST VCO ADJUSTMENT (MPX STEV)

1) Set to Service Mode.

2) Select TEST when 1 and 4, set the data to "1". And then press MTS to MONO.

3) Select MPX, set the data "8".

4) Connect an audio oscillator to R205 using electrolytic capacitor (10μF/16V) and apply the frequency V_{ST}.



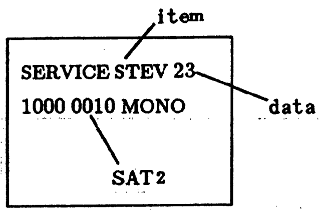
V_{ST}: SINE-WAVE 15.734 kHz
LEVEL 0.28 Vp-p

5) Select STEV with 1 and 4, set the data to "00" with 6. And then, send up the data graduall. Set the data to D1 before SAT2 changes from 0 to 1.

6) Send up data gradually, set the data to D2 when SAT2 changes 1 from 0.

7) Adjust the data of STEV to $\frac{D1+D2}{2}$.

8) Write into the memory by pressing MUTING → then ENTER.



MPX IN LEVEL ADJUSTMENT (MPX)

1) Set to Service Mode.

2) Select TEST with 1 and 4, set the data to "0" with 6. And then press MTS to MONO.

3) Select MPX with 1 and 4, set the data to "08" with 3 and 6.

4) Write into the memory by pressing MUTING → then ENTER.

PILOT CANCEL ADJUSTMENT (PILO)

1) Set to the Service Mode.

2) Select TEST with 1 and 4, set the data to "0" with 6. And then press MTS to MAIN.

3) Select PILO with 1 and 4, set the data to "08" with 3 and 6.

4) Write into the memory by pressing MUTING → then ENTER.

SAP VCO fo ADJUSTMENT (SAPV)

1) Set to Service Mode.

2) Receive a stereo broadcast signal with SAP.

3) Select TEST with 1 and 4, set to the data to "0". And then, press to MTS to MAIN.

4) Connect a digital multimeter to pin ① of A-23 connector. This voltage reading will equal V 1.

5) Press MTS to SAP and this voltage will equal V 2.

6) Select SAPV with 1 and 4, adjust 3 and 6 so that V 2=V 1±0.03 VDC.

7) Write the memory by MUTING → ENTER.

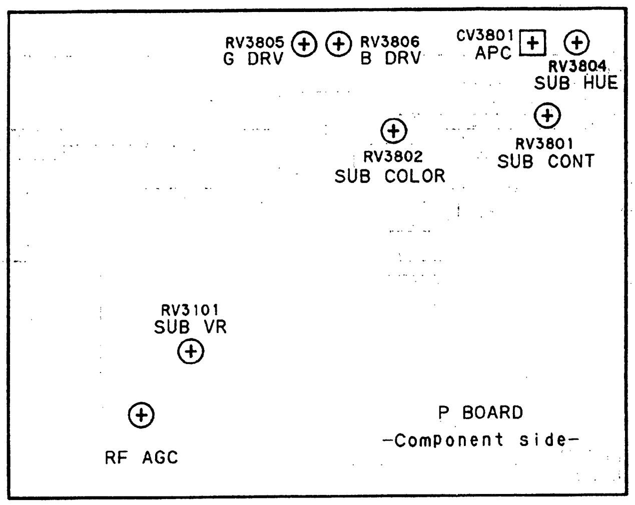
SEPARATION ADJUSTMENT (SEP)

1) Set to Service Mode.

2) Press MTS to MAIN and receive a monoral broadcast signal.
In the next step, receive a stereo broadcast signal.

3) Select SEP and VD with 1 and 4, adjust 3 and 6 so that a clear stereo sound is effected.

P BOARD ADJUSTMENT

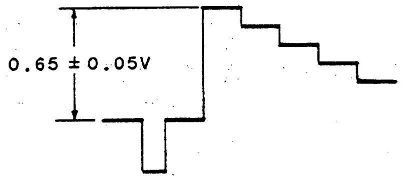


RF AGC ADJUSTMENT (IF BLOCK VR)

1) Receive a color-bar signal.
2) Set to PICTURE IN PICTURE mode.
3) Adjust AGC VR of IF3201 so that snow noise and cross-modulation disappear from the picture.
4) Confirm them at every channel.

SUB CONTRAST ADJUSTMENT (RV3801)

1) Receive a color-bar signal.
2) Set to PICTURE IN PICTURE mode.
3) Observe signal at pin ⑤(Y OUT)of P-3 connector an oscilloscope.
4) Adjust RV3801(SUB CONT)so that the signal level between white and pedestal becomes 0.65±0.05V as shown.

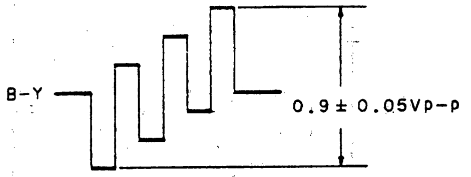


APC ADJUSTMENT (CV3801)

1) Set to PICTURE IN PICTURE mode.
2) Short circuit between pin㉓ of IC3803 and ground with a jumper wire.
3) connect a frequency counter to pin ⑭ of IC3803.
4) Adjust CV3801 to obtain 3,579,545±40Hz.

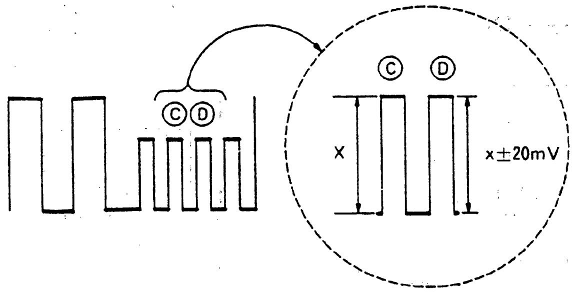
SUB COLOR ADJUSTMENT (RV3802)

1) Receive a color-bar signal
2) Set to PICTURE IN PICTURE mode.
3) COLOR……………RESET
HUE ………………center
4) Connect an oscilloscope to pin ⑦ of P-3 connector.
5) Adjust RV3802 so that voltage is 0.9±0.05Vp-p.



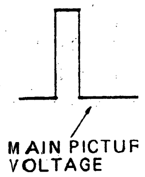
SUB HUE ADJUSTMENT (RV3804)

1) Receive a color-bar signal
2) Set to PICTURE IN PICTURE mode.(1/4 SIZE)
3) PICTURE…………80%
BRIGHT……………center
COLOR………………center
HUE…………………RESET
4) Connect an oscilloscope to pin ⑤ of P-32 connector.
5) Adjust RV3804 so that the © coincides with Ⓓ as shown in figure.



WHITE B

1) Adjust i
main pic
2) Set to P
3) PICTUF
BRIGHT
TORINI
4) Receive
picture
5) Connect
confirm
and mai
6) Connect
adjust R
sub pict
main pic
7) Connect
adjust R
sub pict
main pic



SUB AUD

1) Receive
2) Set to P
3) Select s
commar
4) Adjust
picture
picture.

data

)]

data to "0" with

data to "08" with

ing MUTING →

))]

data to "0" with

data to "08" with

ng MUTING →

]

ith SAP.
the data to "0" .

pin ① of A-23
l equal V 1.
will equal V 2.
3 and 6 so that

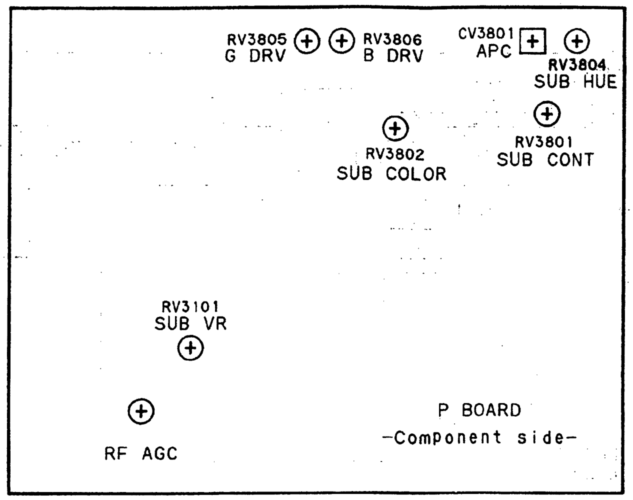
ENTER.

]

a monoral broad-

oadcast signal.
adjust 3 and 6 so

P BOARD ADJUSTMENT

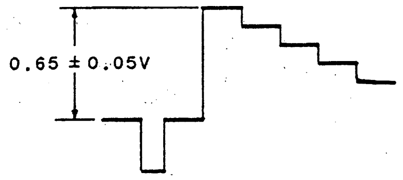

RV3805
G DRV
RV3806
B DRV
CV3801
APC
RV3804
SUB HUE
RV3802
SUB COLOR
RV3801
SUB CONT
RV3101
SUB VR
RF AGC
P BOARD
-Component side-

RF AGC ADJUSTMENT (IF BLOCK VR)

1) Receive a color−bar signal.
2) Set to PICTURE IN PICTURE mode.
3) Adjust AGC VR of IF3201 so that snow noise and cross−modulation disappear from the picture.
4) Confirm them at every channel.

SUB CONTRAST ADJUSTMENT (RV3801)

1) Receive a color−bar signal.
2) Set to PICTURE IN PICTURE mode.
3) Observe signal at pin ⑤(Y OUT)of P−3 connector an oscilloscope.
4) Adjust RV3801(SUB CONT)so that the signal level between white and pedestal becomes 0.65± 0.05V as shown.

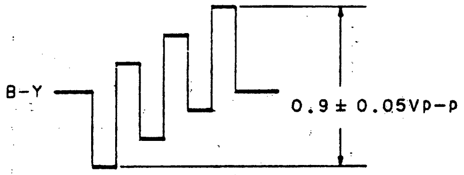


APC ADJUSTMENT (CV3801)

1) Set to PICTURE IN PICTURE mode.
2) Short circuit between pin㉓ of IC3803 and ground with a jumper wire.
3) connect a frequency counter to pin ⑭ of IC3803.
4) Adjust CV3801 to obtain 3,579,545±40Hz.

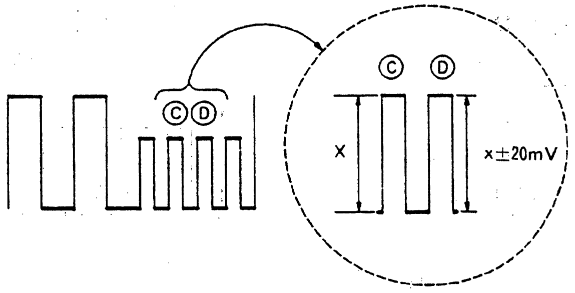
SUB COLOR ADJUSTMENT (RV3802)

1) Receive a color−bar signal
2) Set to PICTURE IN PICTURE mode.
3) COLOR……………RESET
   HUE ………………center
4) Connect an oscilloscope to pin ⑦ of P−3 connector.
5) Adjust RV3802 so that voltage is 0.9±0.05Vp−p.


B−Y
0.9 ± 0.05Vp−p

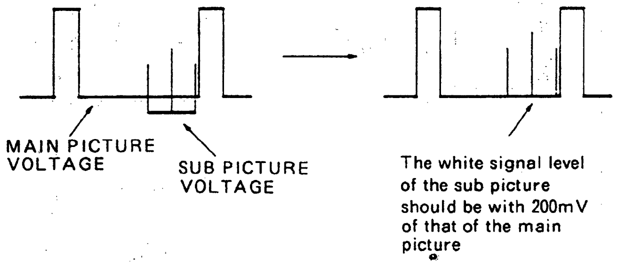
SUB HUE ADJUSTMENT (RV3804)

1) Receive a color−bar signal
2) Set to PICTURE IN PICTURE mode.(1/4 SIZE)
3) PICTURE……………80%
   BRIGHT……………center
   COLOR………………center
   HUE………………RESET
4) Connect an oscilloscope to pin ⑤ of P−32 connector.
5) Adjust RV3804 so that the © coincides with Ⓓ as shown in figure.



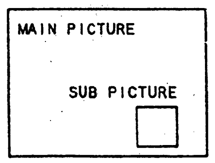
WHITE BALANCE (sub picture)

1) Adjust it after WHITE BALANCE adjusteed of main picture.
2) Set to PICTURE IN PICTURE mode.(1/4 SIZE)
3) PICTURE ……………maximum
   BRIGHT……………maximum
   TORINITONE …………low
4) Receive the white signal with both the main picture and the sub picture.
5) Connect an oscilloscope to KR of C BOARD and confirm that the white signal levels of sub picture and main picture are the seme.
6) Connect the oscilloscope to KG of C BOARD and adjust RV1805 so that the white signal level of the sub picture matches the white signal level of the main picture.
7) Connect the oscilloscope to KB of C BOARD and adjust RV1806 so that the white signal level of the sub picture matches the white signal level of the main picture.

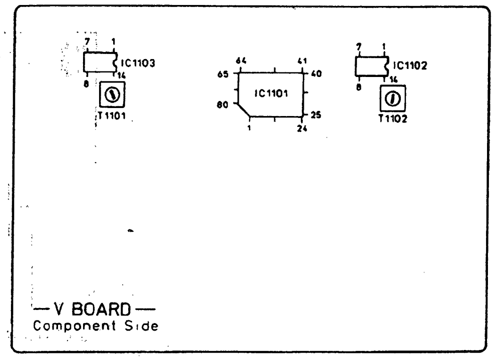

MAIN PICTURE
VOLTAGE
SUB PICTURE
VOLTAGE
The white signal level
of the sub picture
should be with 200mV
of that of the main
picture

SUB AUDIO ADJUSTMENT (RV3101)

1) Receive an off-air signal.
2) Set to PICTURE IN PICTURE mode.
3) Select sub picture with press AUDIO button on the commander.
4) Adjust RV3101 so that the audio level of the sub picture becomes same the audio level of the main picture.


MAIN PICTURE
SUB PICTURE

V BOARD ADJUSTMENTS


IC1103
T1101
IC1101
IC1102
T1102
—V BOARD—
Component Side

H. FREQ (main picture) (T1101)

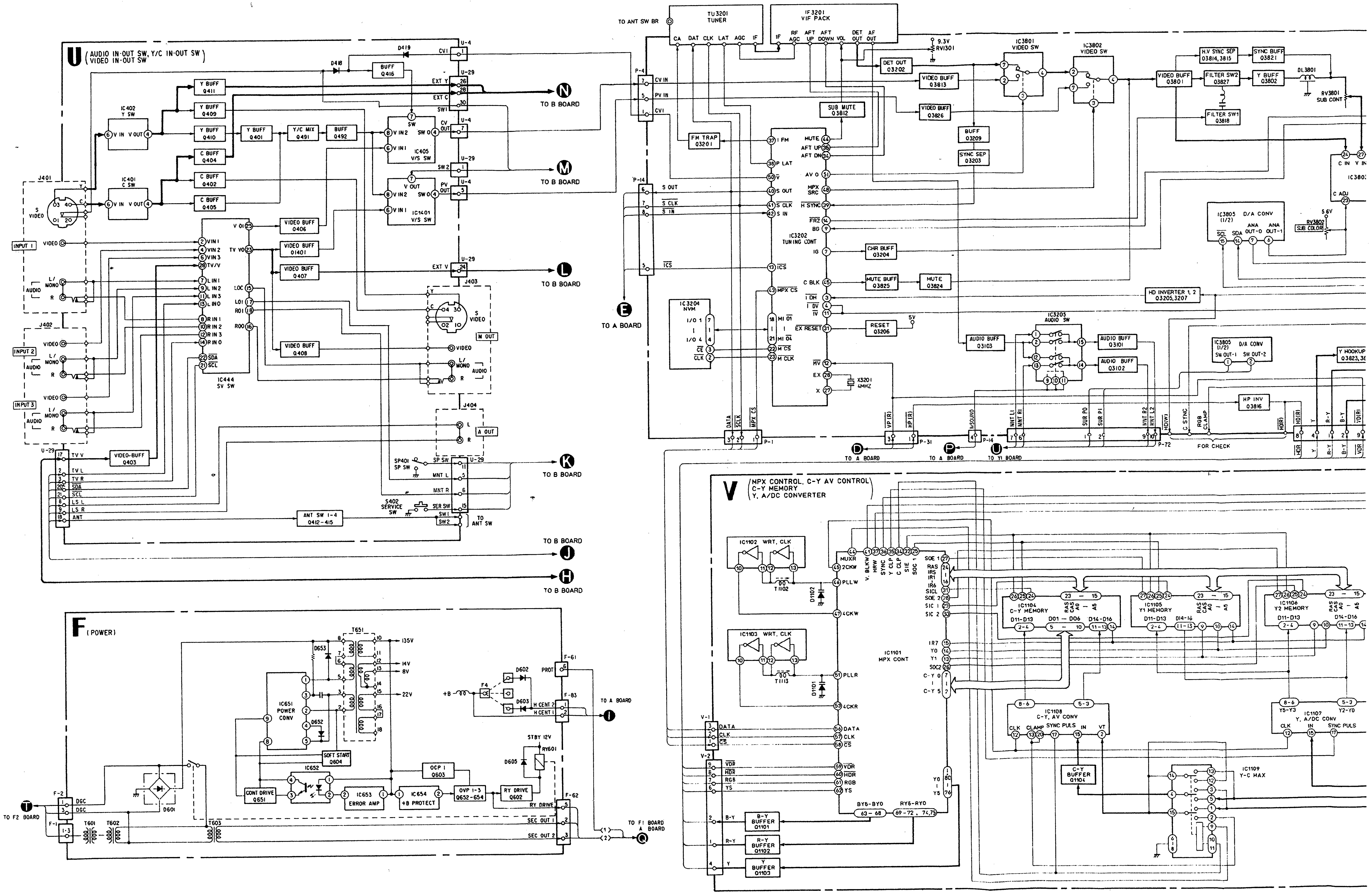
1) Receive a color−bar signal.
2) Set to PICTURE IN PICTURE mode.
3) Short circuit between the pin⑧ of V−2(HDR) Connecter and pin ⑤ of V−1(5V)connecter with a jumper wire.
4) Connect a frequency counter to pin ⑦ of V−2 (RGB)connector.
5) Adjust T1101 〔CLK(P)〕 for 15.734 kHz±10Hz.

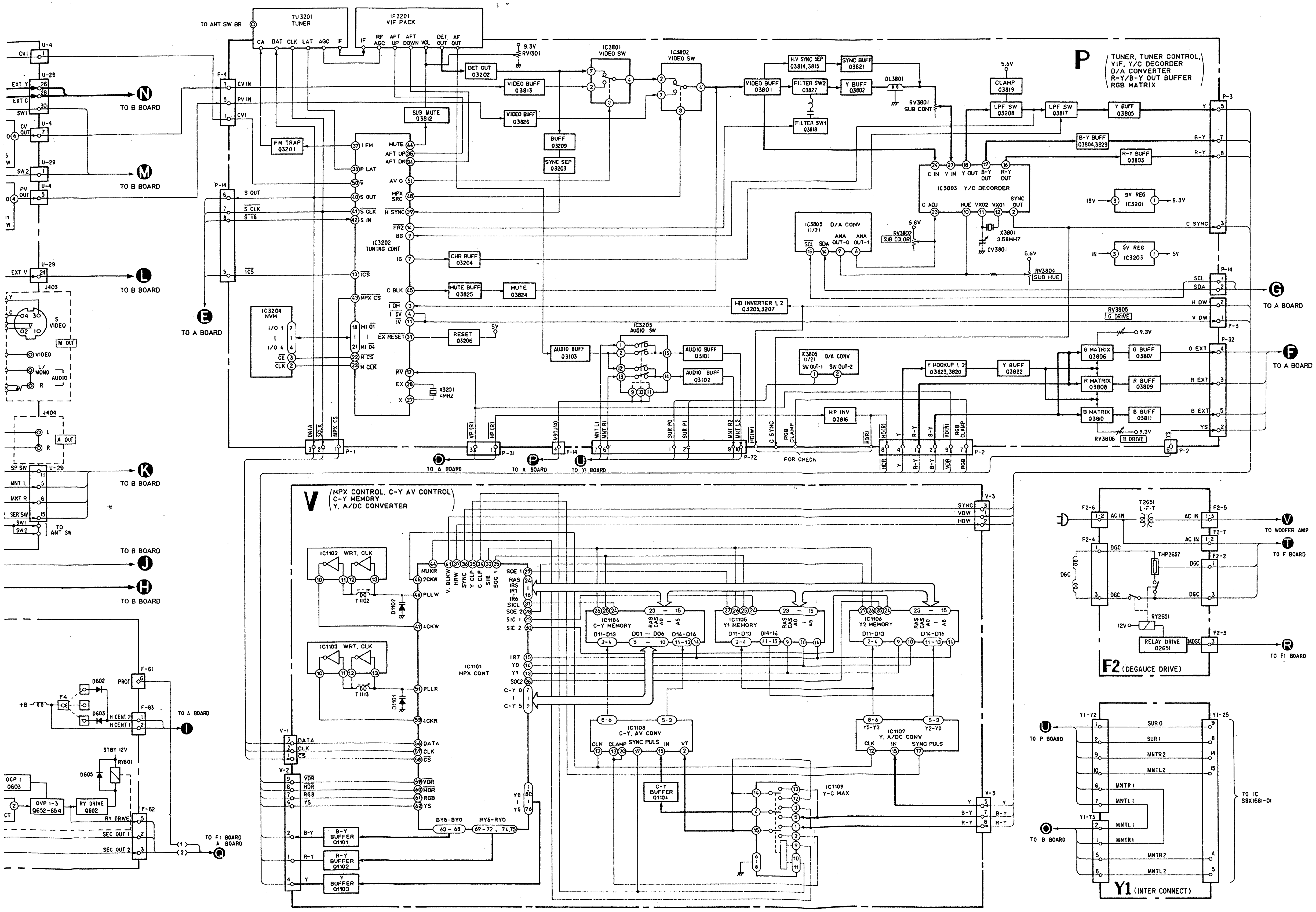
H. FREQ (sub picture) (T1102)

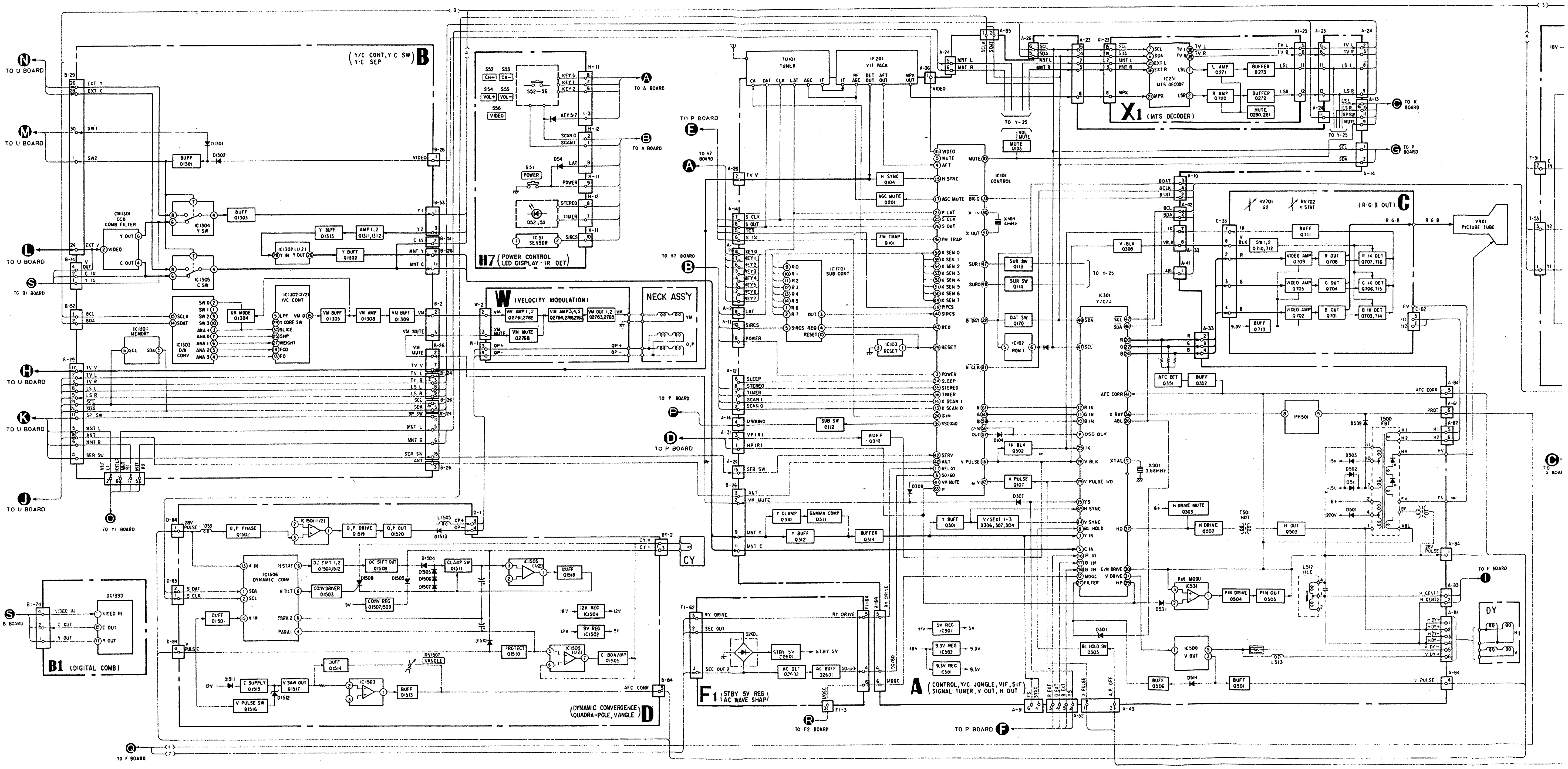
1) Receive a color−bar signal
2) Set to PICTURE IN PICTURE mode.
3) Short circuit between the pin③ of V−3(SYNC) connecter and pin ⑤ of V−1(5V)connecter with a jumper wire.
4) Connect a frequency counter to pin ② of V−3 (HDW)connector.
5) Adjust T1102 〔CLK(C)〕 for 15.734 kHz±10Hz.

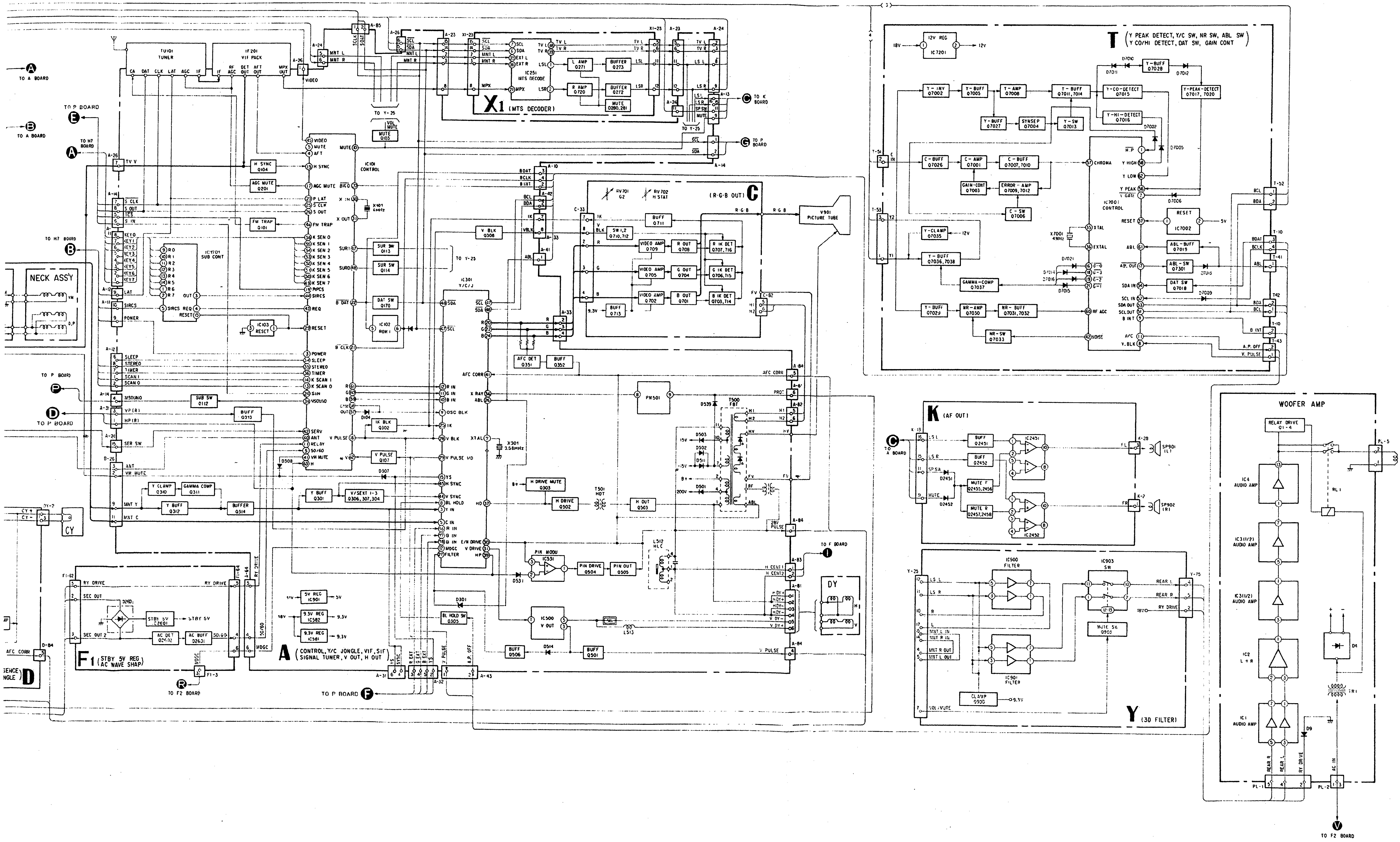
SECTION 6
DIAGRAMS

6-1. BLOCK DIAGRAMS

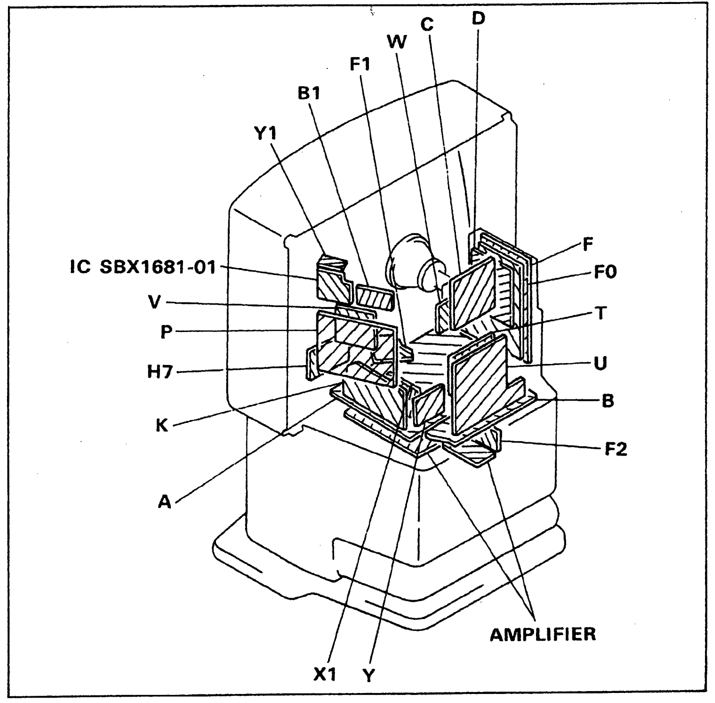

U (AUDIO IN-OUT SW, Y/C IN-OUT SW)
(VIDEO IN-OUT SW)
IC402 Y SW
IC401 C SW
Y BUFF Q411
Y BUFF Q409
Y BUFF Q410
C BUFF Q404
C BUFF Q402
C BUFF Q405
Y BUFF Q401
Y/C MIX Q491
BUFF Q492
BUFF Q416
IC405 V/S SW
IC1401 V/S SW
VIDEO BUFF Q406
VIDEO BUFF Q1401
VIDEO BUFF Q407
VIDEO BUFF Q408
IC444 SV SW
VIDEO-BUFF Q403
ANT SW 1-4 Q412-415
J401
J402
J403
J404
S VIDEO
INPUT 1
INPUT 2
INPUT 3
VIDEO
AUDIO
L/MONO
R
M OUT
A OUT
SP401 SP SW
S402 SERVICE SW
TO ANT SW
TO B BOARD
TO A BOARD
F (POWER)
T651
IC651 POWER CONV
SOFT START Q604
IC652
CONT DRIVE Q651
IC653 ERROR AMP
IC654 +B PROTECT
OCP 1 Q603
OVP 1-3 Q652-654
RY DRIVE Q602
RY601
STBY 12V
135V
14V
8V
22V
TO F2 BOARD
TO F1 BOARD
TO ANT SW BR
TU3201 TUNER
IF3201 VIF PACK
DET OUT Q3202
SUB MUTE Q3812
FM TRAP Q3201
IC3202 TUNING CONT
IC3204 NVM
CHR BUFF Q3204
MUTE BUFF Q3825
MUTE Q3824
RESET Q3206
X3201 4MHZ
BUFF Q3209
SYNC SEP Q3203
VIDEO BUFF Q3813
VIDEO BUFF Q3826
IC3801 VIDEO SW
IC3802 VIDEO SW
VIDEO BUFF Q3801
H.V SYNC SEP Q3814, 3815
SYNC BUFF Q3821
FILTER SW2 Q3827
Y BUFF Q3802
FILTER SW1 Q3818
DL3801
RV3801 SUB CONT
RV1301
RV3802 SUB COLOR
IC3805 D/A CONV (1/2)
HD INVERTER 1, 2 Q3205,3207
IC3203 AUDIO SW
AUDIO BUFF Q3103
AUDIO BUFF Q3101
AUDIO BUFF Q3102
IC3805 D/A CONV
HP INV Q3816
Y HOOKUP Q3823
FOR CHECK
TO Y1 BOARD
V (MPX CONTROL, C-Y AV CONTROL)
(C-Y MEMORY)
(Y, A/DC CONVERTER)
IC1102 WRT, CLK
IC1103 WRT, CLK
T1102
T1113
D1102
D1101
IC1101 MPX CONT
IC1104 C-Y MEMORY
IC1105 Y1 MEMORY
IC1106 Y2 MEMORY
IC1108 C-Y, AV CONV
IC1107 Y, A/DC CONV
IC1109 Y-C MAX
C-Y BUFFER Q1104
B-Y BUFFER Q1101
R-Y BUFFER Q1102
Y BUFFER Q1103


P (TUNER, TUNER CONTROL, VIF, Y/C DECORDER D/A CONVERTER R-Y/B-Y OUT BUFFER RGB MATRIX)
TU3201 TUNER
IF3201 VIF PACK
TO ANT SW BR
IC3801 VIDEO SW
IC3802 VIDEO SW
DET OUT Q3202
VIDEO BUFF Q3813
VIDEO BUFF Q3826
SUB MUTE Q3812
BUFF Q3209
SYNC SEP Q3203
FM TRAP Q3201
IC3202 TUNING CONT
IC3204 NVM
CHR BUFF Q3204
MUTE BUFF Q3825
MUTE Q3824
RESET Q3206
X3201 4MHZ
IC3205 AUDIO SW
AUDIO BUFF Q3103
AUDIO BUFF Q3101
AUDIO BUFF Q3102
H.V SYNC SEP Q3814, 3815
SYNC BUFF Q3821
VIDEO BUFF Q3801
FILTER SW2 Q3827
FILTER SW1 Q3818
Y BUFF Q3802
DL3801
RV3801 SUB CONT
CLAMP Q3819
LPF SW Q3208
LPF SW Q3817
Y BUFF Q3805
B-Y BUFF Q3804, 3829
R-Y BUFF Q3803
IC3803 Y/C DECORDER
X3801 3.58MHZ
CV3801
IC3805 D/A CONV (1/2)
RV3802 SUB COLOR
RV3804 SUB HUE
9V REG IC3201
5V REG IC3203
HD INVERTER 1, 2 Q3205, 3207
RV3805 G DRIVE
IC3805 (1/2) D/A CONV
Y HOOKUP 1, 2 Q3823, 3820
Y BUFF Q3822
G MATRIX Q3806
G BUFF Q3807
R MATRIX Q3808
R BUFF Q3809
B MATRIX Q3810
B BUFF Q3811
RV3806 B DRIVE
HP INV Q3816
FOR CHECK
TO B BOARD
TO A BOARD
TO Y1 BOARD
V (MPX CONTROL, C-Y AV CONTROL C-Y MEMORY Y, A/DC CONVERTER)
IC1102 WRT, CLK
IC1103 WRT, CLK
T1102
T1113
D1102
D1101
IC1101 MPX CONT
IC1104 C-Y MEMORY
IC1105 Y1 MEMORY
IC1106 Y2 MEMORY
IC1108 C-Y, AV CONV
IC1107 Y, A/DC CONV
IC1109 Y-C MAX
C-Y BUFFER Q1104
B-Y BUFFER Q1101
R-Y BUFFER Q1102
Y BUFFER Q1103
F2 (DEGAUCE DRIVE)
T2651 L-F-T
THP2657
RY2651
RELAY DRIVE Q2651
TO WOOFER AMP
TO F BOARD
TO F1 BOARD
Y1 (INTER CONNECT)
TO P BOARD
TO IC SBX1681-01
D602
D603
D605
RY601
F4
OVP 1-3 Q652-654
RY DRIVE Q602
OCP 1 Q603
TO F1 BOARD A BOARD


TO U BOARD
TO T1 BOARD
TO B BOARD
TO A BOARD
TO P BOARD
TO H7 BOARD
TO K BOARD
TO F BOARD
TO F2 BOARD
Y/C CONT, Y/C SW
Y/C SEP
B
B1 (DIGITAL COMB)
H7 (POWER CONTROL LED DISPLAY・IR DET)
W (VELOCITY MODULATION)
NECK ASS'Y
CY
D (DYNAMIC CONVERGENCE QUADRA-POLE, VANGLE)
F1 (STBY 5V REG AC WAVE SHAP)
A (CONTROL, Y/C JONGLE, VIF, SIF SIGNAL TUNER, V OUT, H OUT)
X1 (MTS DECODER)
C (R·G·B OUT)
V901 PICTURE TUBE
T500 FBT
DY
IC101 CONTROL
IC301 Y/C/J
IC1306 DYNAMIC CONV
IC2501 MTS DECODE
TU101 TUNER
IF201 VIF PACK
CM1301 CCD COMB FILTER
IC1301 MEMORY
IC1303 D/A CONV
IC1302 Y/C CONT
IC1390
IC1701 SUB CONT
IC102 ROM
IC103 RESET
IC500 V OUT
IC531 PIN MODU
IC1504 12V REG
IC1502 9V REG
IC1501 5V REG
H OUT Q503
H DRIVE Q502
H DRIVE MUTE Q303


X1 (MTS DECODER)
A (CONTROL, Y/C JUNGLE, VIF, SIF SIGNAL TUNER, V OUT, H OUT)
C (R·G·B OUT)
F1 (STBY 5V REG AC WAVE SHAP)
D
T (Y PEAK DETECT, Y/C SW, NR SW, ABL SW Y CO/HI DETECT, DAT SW, GAIN CONT)
K (AF OUT)
Y (3D FILTER)
WOOFER AMP
NECK ASS'Y
CY
DY
TU101 TUNER
IF201 VIF PACK
IC251 MTS DECODE
IC101 CONTROL
IC1701 SUB CONT
IC301 Y/C/J
V901 PICTURE TUBE
T500 FBT
IC7001 CONTROL
IC900 FILTER
IC903 SW
IC901 FILTER
TO A BOARD
TO P BOARD
TO H7 BOARD
TO K BOARD
TO F BOARD
TO F2 BOARD
WOOFER
SP901 (L)
SP902 (R)

6-2. CIRCUIT BOARDS LOCATION



6-3. PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

Note :

- All capacitors are in μF unless otherwise noted.
  pF : μμF 50 WV or less are not indicated except for electrolytics.
- Indication of resistance, which does not have one for rating electrical power, is as follows.

Pitch : 5 mm
Rating electrical power 1/4W

- All resistors are in ohms.
- : nonflammable resistor.
- : fusible resistor.
- △ : internal component.
- ▭ : panel designation, and adjustment for repair.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- The components identified by ☒ in this basic schematic diagram have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.
- When replacing components identified by ◪, make the necessary adjustments indicated. If results do not meet the specified value, change the component identified by ☒ and repeat the adjustment until the specified value is achieved. (Refer to R542 and R543 on page 26–27.)
- When replacing the part in below table be sure to perform the related adjustment.

Part replaced (◪)	Adjustment (☒)
IC301, PM501, R549, R564	R549 (HOLD-DOWN)
IC301, IC653, PM501, D539, C556, R556, R564, R567, R663, T500, R509	R567 (HOLD-DOWN)

- All voltages are in V.
- Voltage are dc with respect to ground unless otherwise noted.
- Readings are taken with a 10 MΩ digital multimeter.
- Readings are taken with a color-bar signal input.
- Voltage variations may be noted due to normal production tolerance.
- ▬▬▬ : B+ bus.
- ▬ ▬ ▬ : B− bus.
- ▒▒▒ : signal path.

Reference information

RESISTOR	: RN	METAL FILM
	: RC	SOLID
	: FPRD	NONFLAMMABLE CARBON
	: FUSE	NONFLAMMABLE FUSIBLE
	: RW	NONFLAMMABLE WIREWOUND
	: RS	NONFLAMMABLE METAL OXIDE
	: RB	NONFLAMMABLE CEMENT
COIL	: LF-8L	MICRO INDUCTOR
CAPACITOR	: TA	TANTALUM
	: PS	STYROL
	: PP	POLYPROPYLENE
	: PT	MYLAR
	: MPS	METALIZED POLYESTER
	: MPP	METALIZED POLYPROPYLENE
	: ALB	BIPOLAR
	: ALT	HIGH TEMPERATURE
	: ALR	HIGH RIPPLE

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Note: Les composants identifiés par un tramé et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

TUNER, H OUT
VIF, V OUT
SIF, Y/C JUNGLE
PLL CONTROLLER

A **A**

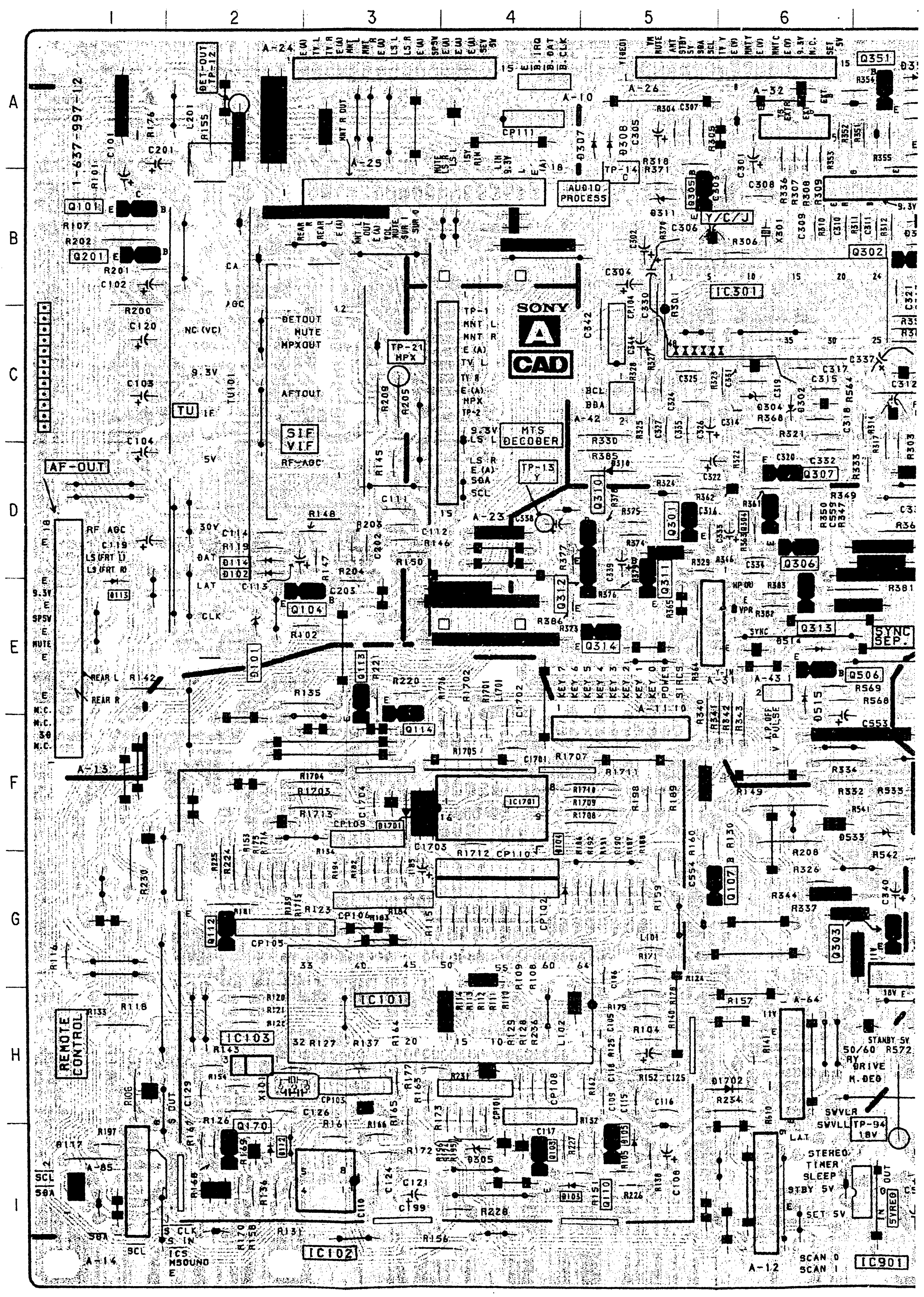
IC	
IC101	H-3
IC102	I-3
IC103	H-2
IC301	B-6
IC500	E-8
IC531	I-9
IC581	G-7
IC582	I-7
IC901	I-7
IC1701	F-4

TRANSISTOR	
Q101	B-1
Q103	I-4
Q104	E-3
Q107	G-6
Q110	I-5
Q112	G-2
Q113	E-3
Q114	E-3
Q170	I-2
Q201	B-1
Q301	D-5
Q302	B-7
Q303	G-7
Q304	D-6
Q305	B-5
Q306	D-6
Q307	D-6
Q308	B-7
Q310	D-5
Q311	D-5
Q312	D-5
Q313	E-6
Q314	E-5
Q351	A-7
Q352	A-7
Q501	D-8
Q502	I-12
Q503	G-12
Q504	H-10
Q505	I-10
Q506	E-6

DIODE	
D101	E-2
D102	D-2
D103	I-4
D104	G-4
D105	I-5
D112	I-2
D113	D-1
D114	D-2
D301	D-7
D302	C-6
D303	B-7
D304	C-6
D305	I-4
D307	A-5
D308	A-5
D310	D-5
D311	B-5
D350	A-7
D500	F-8
D501	C-9
D502	B-8
D503	A-9
D504	F-8
D505	C-9
D506	H-10
D507	I-10
D508	H-10
D509	F-8
D510	D-9
D511	B-8
D512	E-12
D513	E-8
D514	E-6
D515	E-6
D517	F-8
D531	F-7
D533	F-7
D539	H-8
D1701	F-3

TEST POINT	
TP12	A-2
TP13	D-4
TP14	A-5
TP21	C-3
TP80	I-9
TP82	E-9
TP87	D-10
TP91	I-10
TP92	A-9
TP93	B-8
TP94	I-7
TP95	B-9
TP96	I-9
TP97	C-9

– A Board –



TUNER, H OUT
VIF, V OUT
SIF, Y/C JUNGLE
PLL CONTROLLER

A

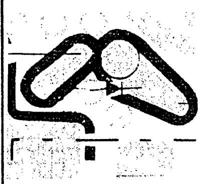
A

IC	
IC101	H-3
IC102	I-3
IC103	H-2
IC301	B-6
IC500	E-8
IC531	I-9
IC581	G-7
IC582	I-7
IC901	I-7
IC1701	F-4

TRANSISTOR	
Q101	B-1
Q103	I-4
Q104	E-3
Q107	G-6
Q110	I-5
Q112	G-2
Q113	E-3
Q114	E-3
Q170	I-2
Q201	B-1
Q301	D-5
Q302	B-7
Q303	G-7
Q304	D-6
Q305	B-5
Q306	D-6
Q307	D-6
Q308	B-7
Q310	D-5
Q311	D-5
Q312	D-5
Q313	E-6
Q314	E-5
Q351	A-7
Q352	A-7
Q501	D-8
Q502	I-12
Q503	G-12
Q504	H-10
Q505	I-10
Q506	E-6

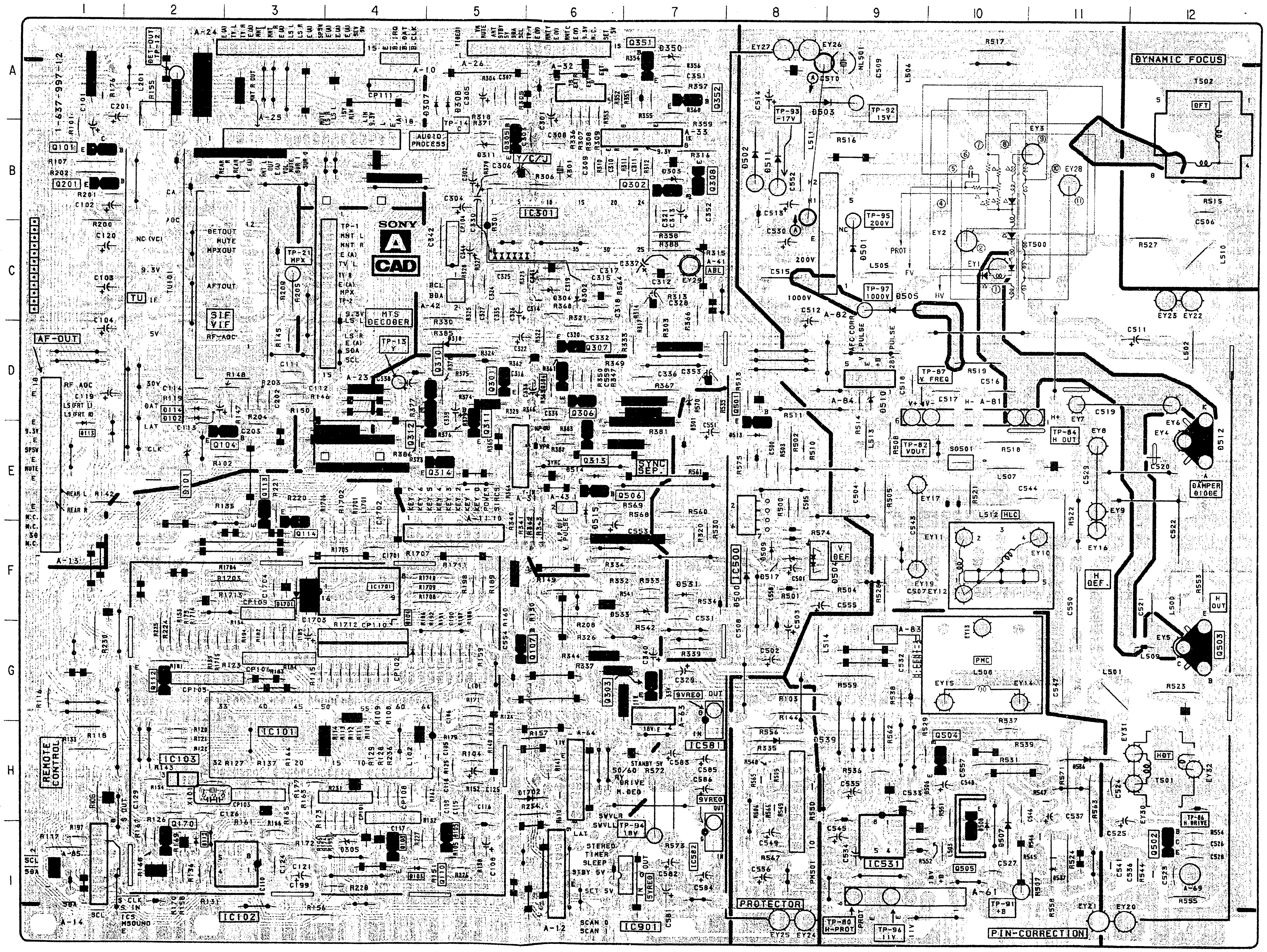
DIODE	
D101	E-2
D102	D-2
D103	I-4
D104	G-4
D105	I-5
D112	I-2
D113	D-1
D114	D-2
D301	D-7
D302	C-6
D303	B-7
D304	C-6
D305	I-4
D307	A-5
D308	A-5
D310	D-5
D311	B-5
D350	A-7
D500	F-8
D501	C-9
D502	B-8
D503	A-9
D504	F-8
D505	C-9
D506	H-10
D507	I-10
D508	H-10
D509	F-8
D510	D-9
D511	B-8
D512	E-12
D513	E-8
D514	E-6
D515	E-6
D517	F-8
D531	F-7
D533	F-7
D539	H-8
D1701	F-3

TEST POINT	
TP12	A-2
TP13	D-4
TP14	A-5
TP21	C-3
TP80	I-9
TP82	E-9
TP87	D-10
TP91	I-10
TP92	A-9
TP93	B-8
TP94	I-7
TP95	B-9
TP96	I-9
TP97	C-9



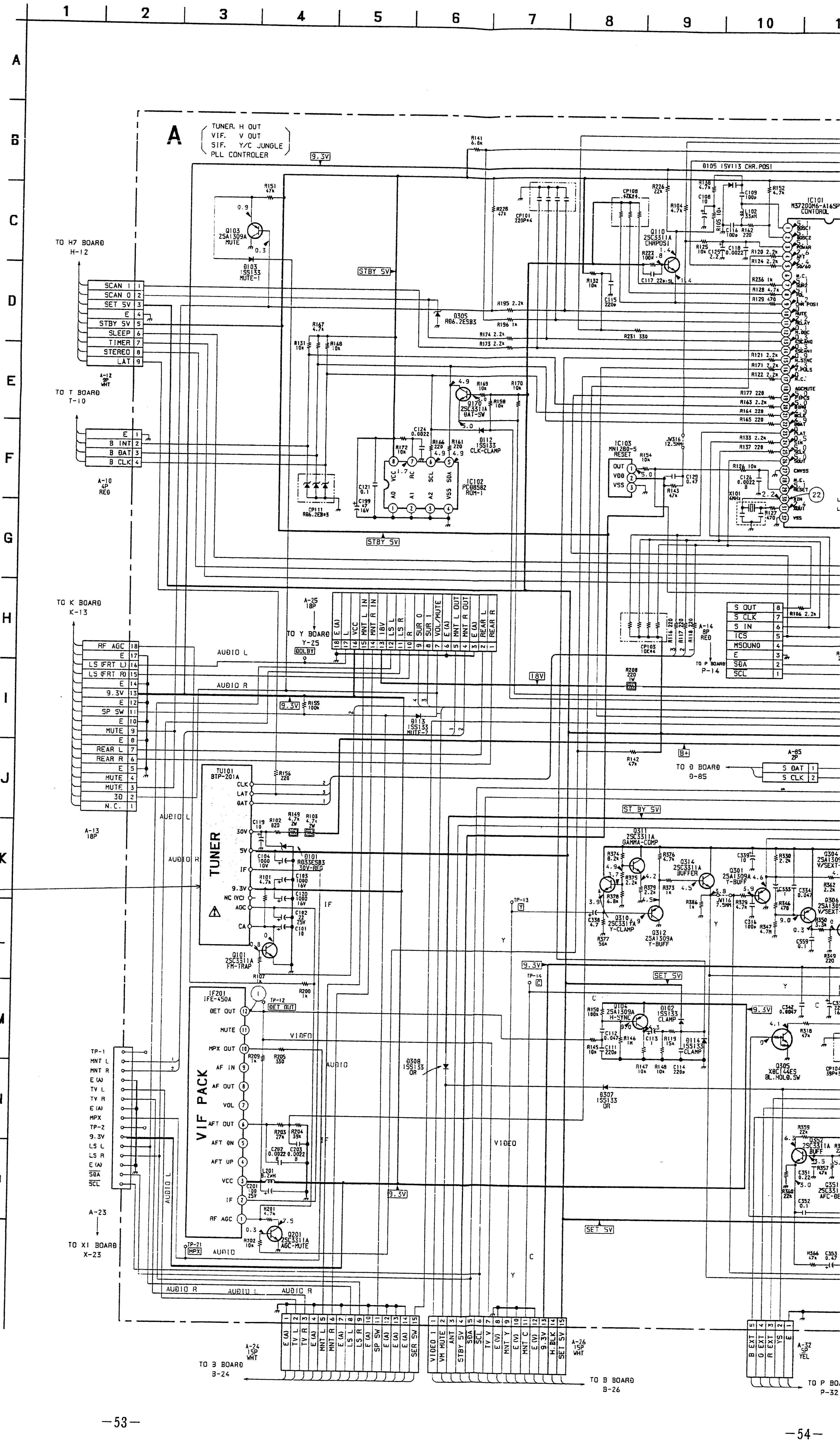
NOTE:
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

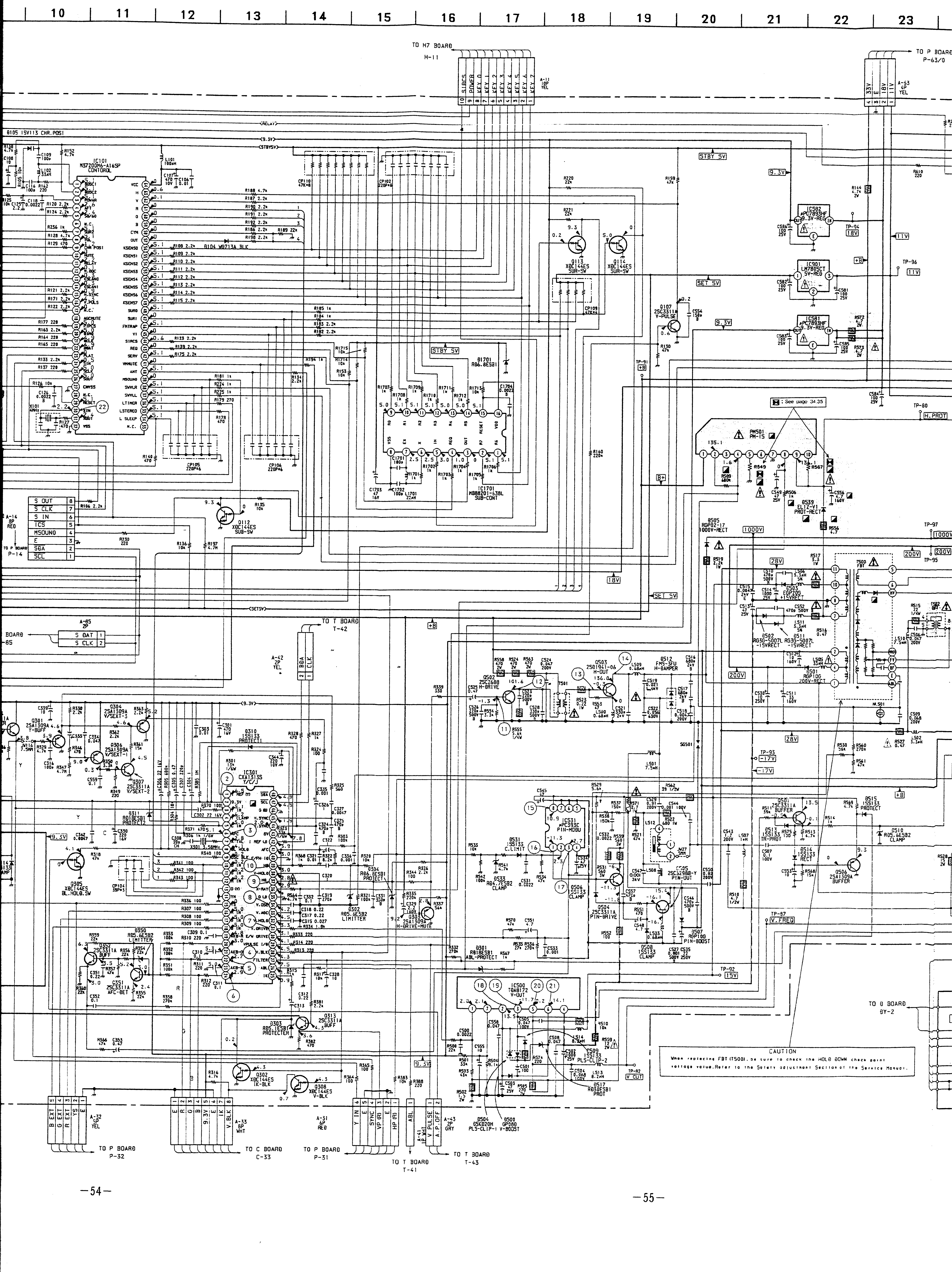
– A Board –


1
2
3
4
5
6
7
8
9
10
11
12
A
B
C
D
E
F
G
H
I
1-637-997-12
SONY
A
CAD
AF-OUT
SIF VIF
MTS DECODER
AUDIO PROCESS
Y/C/J
IC301
IC500
IC1701
IC101
IC103
IC102
IC581
IC582
IC901
IC531
REMOTE CONTROL
PROTECTOR
PIN-CORRECTION
DYNAMIC FOCUS
DAMPER DIODE
H DEF.
H OUT
V DEF
SYNC SEP
PMC
HOT
T501
T502
T500
DFT
TP-92 15V
TP-93 -17V
TP-95 200V
TP-97 1000V
TP-87 V FREQ
TP-82 VOUT
TP-84 H OUT
TP-80 H-PROT
TP-91 +B
TP-96 11V
TP-94 18V
TP-21 MPX
TP-13 Y
TP-12 DET-OUT

MEASURE USING NIVM

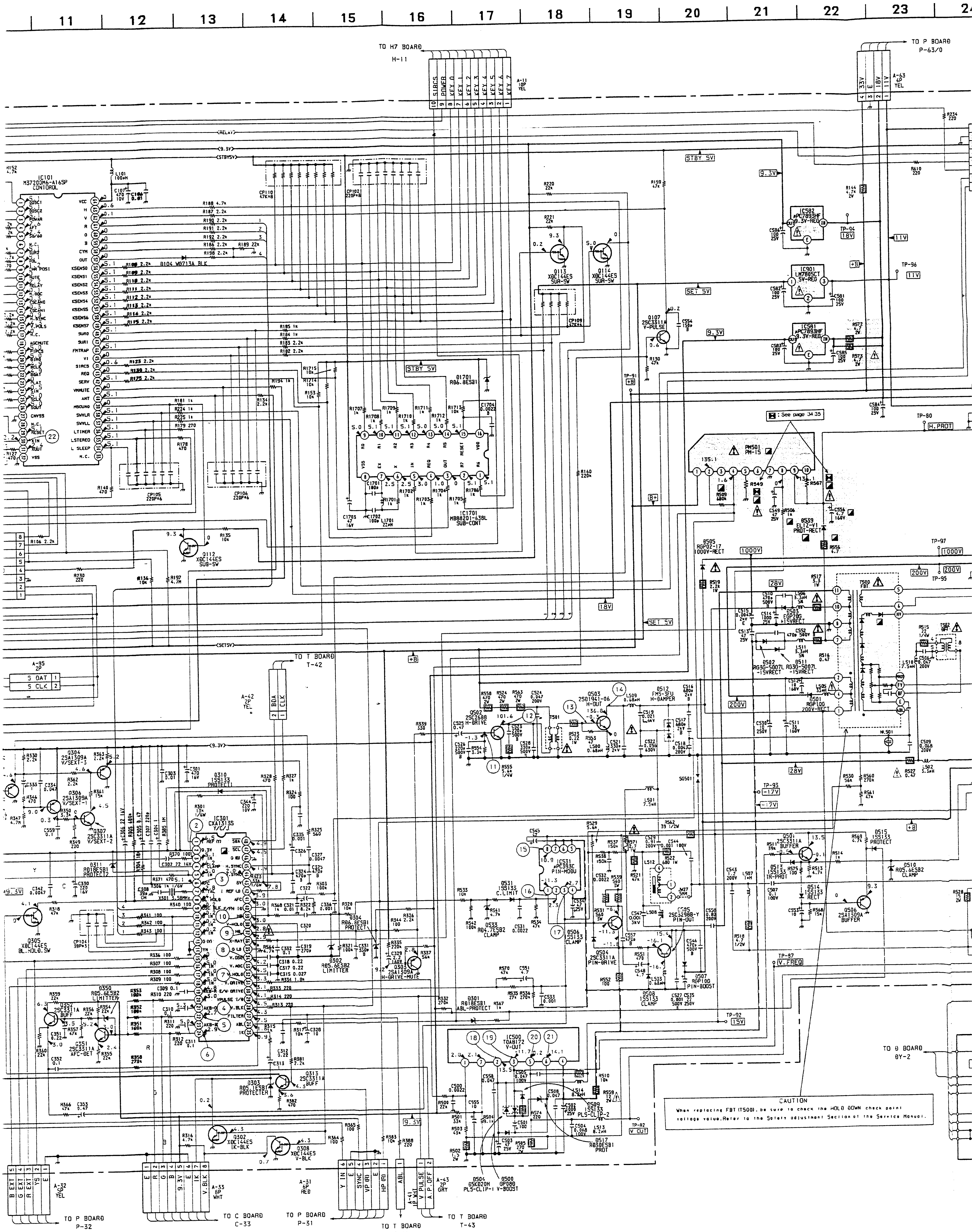
CHANNEL	VOLTAGE
<VL>CH.2-CH.6 CH.A-6-CH.B	1.5V±1V~20.5V±1V
<VL>CH.2-CH.6 CH.A-6-CH.B	1.5V±1V~25.0V±1V
<VL>CH.2-CH.6 CH.A-6-CH.B	1.5V±1V~25.0V±1V


A
TUNER, H OUT
VIF. V OUT
SIF. Y/C JUNGLE
PLL CONTROLER
TO H7 BOARD H-12
SCAN I
SCAN O
SET 5V
E
STBY 5V
SLEEP
TIMER
STEREO
LAT
TO T BOARD T-10
B INT
B DAT
B CLK
TO K BOARD K-13
RF AGC
LS (FRT L)
LS (FRT R)
9.3V
SP SW
MUTE
REAR L
REAR R
30
N.C.
TO Y BOARD Y-25
DOLBY
AUDIO L
AUDIO R
TUNER
TU101 BTP-201A
IF201 IFE-450A
VIF PACK
VIDEO
IC101 M37200M6-A16SP CONTROL
IC102 PCB8582 ROM-1
IC103 MN1280-S RESET
TO P BOARD P-14
S OUT
S CLK
S IN
ICS
MSOUND
SDA
SCL
TO D BOARD D-85
S DAT
S CLK
STBY 5V
SET 5V
18V
B+
Q311 2SC3311A GAMMA-COMP
Q314 2SC3311A BUFFER
Q301 2SA1309A Y-BUFF
Q310 2SC3311A Y-CLAMP
Q312 2SA1309A Y-BUFF
Q104 2SA1309A H-SYNC
Q102 1SS133 CLAMP
Q305 XBC144ES BL.HOLD.SW
Q101 2SC3311A FM-TRAP
Q201 2SC3311A AGC-MUTE
Q103 2SA1309A MUTE
Q110 2SC3311A CHRPOSI
Q170 2SC3311A BAT-SW
TO XI BOARD X-23
TO B BOARD B-24
TO B BOARD B-26
TO P BOARD P-32

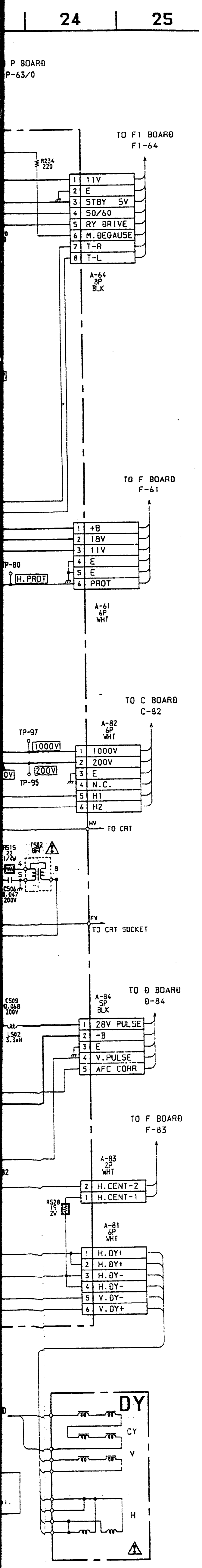

10
11
12
13
14
15
16
17
18
19
20
21
22
23
TO H7 BOARD H-11
TO P BOARD P-63/0
IC101 M37200M6-A16SP CONTROL
IC1701 MB88201-638L SUB-CONT
IC582 µPC7893HF 9.3V-REG
IC901 LM7805CT 5V-REG
IC581 µPC7893HF 9.3V-REG
IC301 CXA1313S Y/C/J
IC531 µPC393C PIN-MODU
IC500 TDA8172 V-OUT
Q112 XDC144ES SUB-SW
Q113 XDC144ES SUB-SW
Q114 XDC144ES SUB-SW
Q107 2SC3311A V-PULSE
Q502 2SC2688 H-DRIVE
Q503 2SD1941-06 H-OUT
Q504 2SC3311A PIN-DRIVE
Q505 2SC2988-Y PIN-OUT
Q501 2SC3311A BUFFER
Q506 2SA1309A BUFFER
Q301 2SA1309A Y-BUFF
Q304 2SA1309A V/SEXT-3
Q306 2SA1309A V/SEXT-1
Q307 2SC3311A V/SEXT-2
Q305 XDC144ES BL.HOLD.SW
Q352 2SC3311A BUFF
Q351 2SC3311A AFC-DET
Q302 XDC144ES IK-BLK
Q308 XDC144ES V-BLK
Q313 2SC3311A BUFF
Q303 2SA1309A H-DRIVE-MUTE
D1701 RD6.8ESB1
D505 RGP02-17 1000V-RECT
D501 RGP10G 200V-RECT
D539 EL1Z-V1 PROT-RECT
D502 RG3G-S007L 15VRECT
D511 RG3G-S007L 15VRECT
D503 EGP20G 15VRECT
D512 FMS-SFU H-DAMPER
D507 RGP10G PIN-BOOST
D517 RD30ESB1 PROT
D504 GSK020H PLS-CLIP-1
D500 GP08D V-BOOST
D509 1SS133 PLS-CLIP-2
T500 FBT
T501
PH501 PH-15
See page 34,35
STBY 5V
SET 5V
9.3V
18V
11V
1000V
200V
28V
-17V
15V
+B
H.PROT
V.FREQ
V CUT
TP-91
TP-92
TP-93
TP-94
TP-95
TP-96
TP-97
TP-80
TP-82
TP-87
S OUT
S CLK
S IN
ICS
MSOUND
E
SDA
SCL
A-14 8P RED
TO P BOARD P-14
A-85 2P
S DAT
S CLK
TO T BOARD T-42
A-42 2P YEL
SDA
S CLK
A-11 10P YEL
SIRCS
POWER
KEY 0
KEY 1
KEY 2
KEY 3
KEY 4
KEY 5
KEY 6
KEY 7
A-63 4P YEL
33V
E
18V
11V
A-32 5P YEL
B EXT
G EXT
R EXT
YS
E
TO P BOARD P-32
A-33 8P WHT
E
R
G
B
9.3V
E
IK
V.BLK
TO C BOARD C-33
A-31 6P RED
Y IN
E
SYNC
VP (R)
E
HP (R)
TO P BOARD P-31
A-41 1P
ABL
TO T BOARD T-41
A-43 2P GRY
V PULSE
A.P.OUT
TO T BOARD T-43
TO B BOARD BY-2

CAUTION

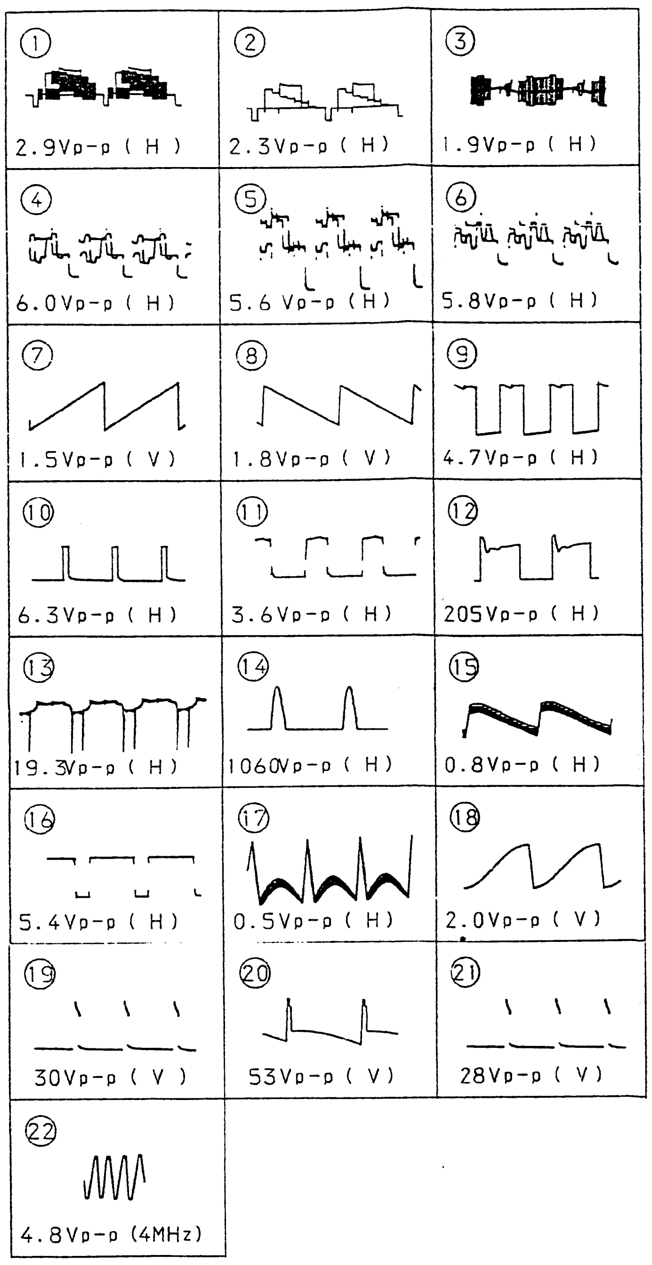
When replacing FBT (T500), be sure to check the HOLD DOWN check point voltage value. Refer to the Safety adjustment Section of the Service Manual.


11
12
13
14
15
16
17
18
19
20
21
22
23
TO H7 BOARD
H-11
SIRCS
POWER
KEY 0
KEY 1
KEY 2
KEY 3
KEY 4
KEY 5
KEY 6
KEY 7
A-11
10P
YEL
TO P BOARD
P-63/0
33V
E
18V
11V
A-63
4P
YEL
IC101
M37200M6-A16SP
CONTROL
STBY 5V
9.3V
IC582
μPC7893HF
9.3V-REG
IC901
LM7805CT
5V-REG
IC581
μPC7893HF
9.3V-REG
SET 5V
Q113
XDC144ES
SUR-SW
Q114
XDC144ES
SUR-SW
Q107
2SC3311A
V-PULSE
D1701
RD6.8ESB1
IC1701
MB88201-638L
SUB-CONT
TP-80
H.PROT
PM501
PH-15
D539
EL1Z-V1
PROT-RECT
D505
RGP02-17
1000V-RECT
TP-97
1000V
T502
FBT
Q112
XDC144ES
SUB-SW
A-95
2P
S DAT
S CLK
TO T BOARD
T-42
A-42
2P
YEL
BOA
CLK
Q502
2SC2688
H-DRIVE
Q503
2SD1941-06
H-OUT
D512
FMS-SFU
H-DAMPER
D502
RG3D-5007L
-15VRECT
D511
RG3D-5007L
-15VRECT
D501
RGP10G
200V-RECT
Q304
2SA1309A
V/SEXT-3
Q306
2SA1309A
V/SEXT-1
Q307
2SC3311A
V/SEXT-2
D310
1SS133
PROTECT1
IC301
CXA1313S
Y/C/J
D311
RD18ESB1
PROTECT2
Q305
XDC144ES
BL.HOLD.SW
Q350
RD5.6ESB2
LIMITTER
Q357
2SC3311A
BUFF
Q351
2SC3311A
AFC-DET
D304
RD6.8ESB1
PROTECT
D302
RD5.6ESB2
LIMITTER
Q303
2SA1309A
H-DRIVE-MUTE
IC531
μPC393C
PIN-MODU
D531
1SS133
C.LIMIT
D533
RD4.7ESB2
CLAMP
D506
1SS133
CLAMP
Q504
2SC3311A
PIN-DRIVE
Q505
2SC2988-Y
PIN-OUT
D507
RGP10G
PIN-BOOST
D508
1SS133
CLAMP
Q501
2SC3311A
BUFFER
D512
1SS133
IR-PROT
D515
1SS133
PROTECT
D510
RD5.6ESB2
CLAMP
D514
1SS133
RECT
Q506
2SA1309A
BUFFER
D301
RD18ESB1
ABL-PROTECT
IC500
TDA8172
V-OUT
D313
2SC3311A
BUFF
D303
RD5.1ESB1
PROTECTER
Q302
XDC144ES
IK-BLK
Q308
XDC144ES
V-BLK
D509
1SS133
PLS-CLIP-2
D517
RD30ESB1
PROT
D504
05KD20H
PLS-CLIP-1
D500
GP08D
V-BOOST
TP-82
V CUT
TP-92
15V
TP-87
V.FREQ
TO 0 BOARD
0Y-2
: See page 34 35
B EXT
G EXT
R EXT
YS
E
A-32
5P
YEL
TO P BOARD
P-32
R
G
B
9.3V
E
IK
V.BLK
A-33
8P
WHT
TO C BOARD
C-33
Y IN
E
SYNC
VP (R)
HP (R)
A-31
6P
RED
TO P BOARD
P-31
ABL
A-41
1P
TO T BOARD
T-41
V PULSE
A.P.OFF
A-43
2P
GRY
TO T BOARD
T-43

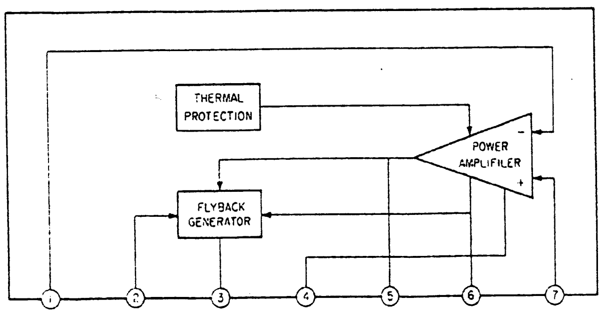
CAUTION
When replacing FBT (T500), be sure to check the HOLD DOWN check point voltage value. Refer to the Safety adjustment Section of the Service Manual.


24
25
P BOARD
P-63/0
TO F1 BOARD
F1-64
R234
220
1 11V
2 E
3 STBY 5V
4 50/60
5 RY DRIVE
6 M.DEGAUSE
7 T-R
8 T-L
A-64
8P
BLK
TO F BOARD
F-61
1 +B
2 18V
3 11V
4 E
5 E
6 PROT
TP-80
H.PROT
A-61
6P
WHT
TO C BOARD
C-82
A-82
6P
WHT
TP-97
1000V
200V
TP-95
1 1000V
2 200V
3 E
4 N.C.
5 H1
6 H2
HV
TO CRT
R515
22
1/4W
T502
C506
0.047
200V
FV
TO CRT SOCKET
TO D BOARD
D-84
A-84
5P
BLK
C509
0.068
200V
L502
3.3mH
1 28V PULSE
2 +B
3 E
4 V.PULSE
5 AFC CORR
TO F BOARD
F-83
A-83
2P
WHT
2 H.CENT-2
1 H.CENT-1
R528
15
2W
A-81
6P
WHT
1 H.DY+
2 H.DY+
3 H.DY-
4 H.DY-
5 V.DY-
6 V.DY+
DY
CY
V
H

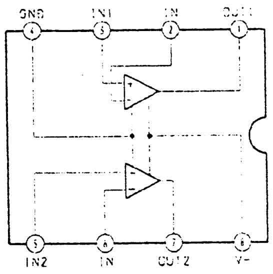
A BOARD



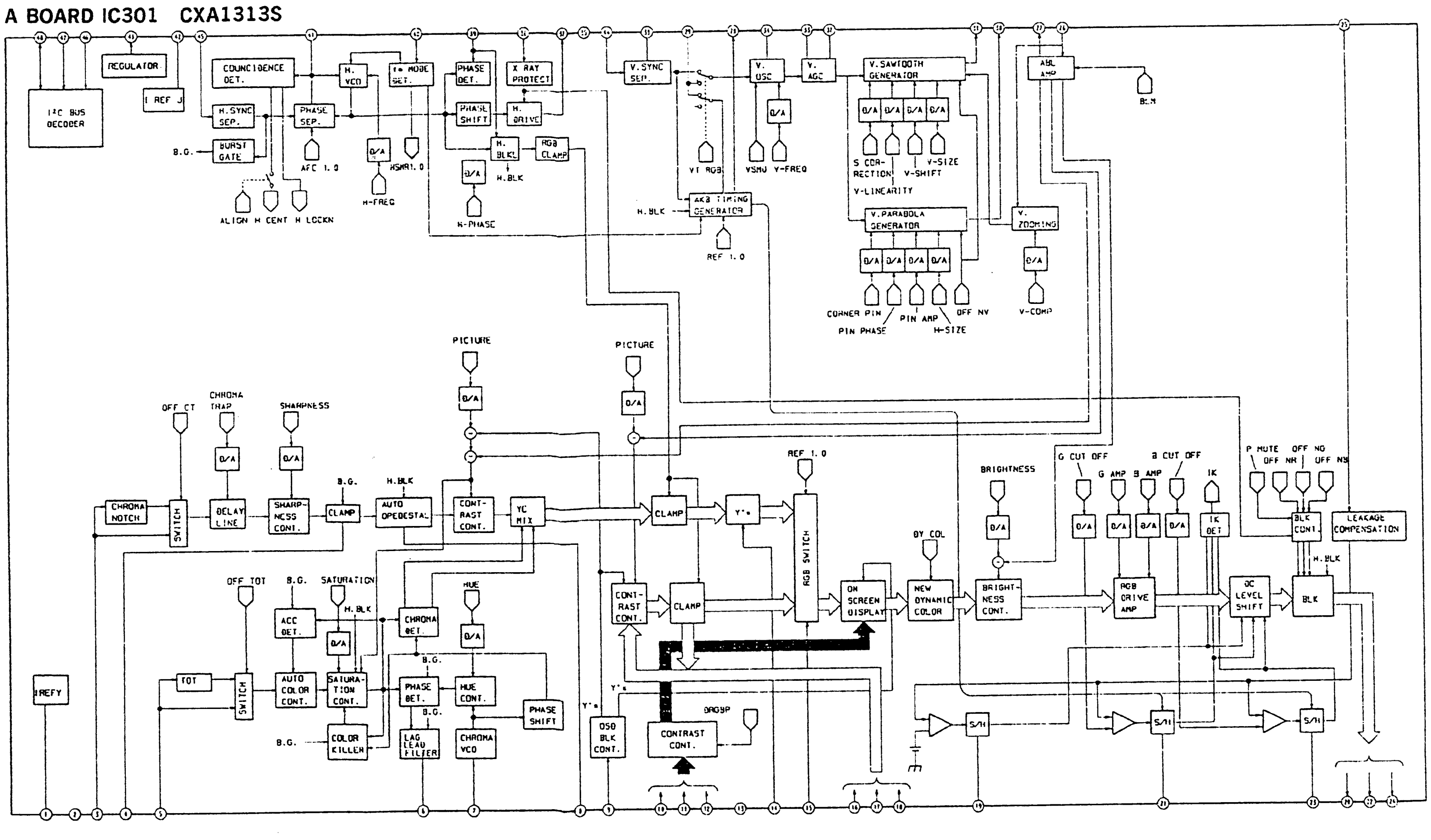
A BOARD IC500 TDA8172


THERMAL PROTECTION
POWER AMPLIFILER
FLYBACK GENERATOR
-
+
1
2
3
4
5
6
7

A BOARD IC531 μPC393C


GND
IN1
IN
OUT
1
2
3
4
5
6
7
8
IN2
IN
OUT2
V-

A BOARD IC301 CXA1313S


I²C BUS DECODER
REGULATOR
I REF J
COUNCIDENCE DET.
H.SYNC SEP.
BURST GATE
B.G.
PHASE SEP.
AFC 1.0
H. VCO
D/A
H-FREQ
f= MODE DET.
HSHR1.0
PHASE DET.
PHASE SHIFT
D/A
H-PHASE
X RAY PROTECT
H. DRIVE
H. BLKL
H.BLK
RGB CLAMP
ALIGN
H CENT
H LOCKN
V.SYNC SEP.
VT RGB
AKB TIMING GENERATOR
H.BLK
REF 1.0
V. OSC
D/A
VSHU
Y-FREQ
V. AGC
V.SAWTOOTH GENERATOR
D/A
S COR-RECTION
V-LINEARITY
V-SHIFT
V-SIZE
V.PARABOLA GENERATOR
CORNER PIN
PIN PHASE
PIN AMP
H-SIZE
OFF NV
V. ZOOMING
V-COMP
ABL AMP
BLM
PICTURE
OFF CT
CHROMA TRAP
SHARPNESS
CHROMA NOTCH
SWITCH
DELAY LINE
SHARP-NESS CONT.
CLAMP
B.G.
H.BLK
AUTO OPEDESTAL
CONT-RAST CONT.
YC MIX
CLAMP
Y'ₛ
RGB SWITCH
REF 1.0
OFF TOT
SATURATION
ACC DET.
AUTO COLOR CONT.
TOT
SATURA-TION CONT.
COLOR KILLER
CHROMA DET.
PHASE DET.
LAG LEAD FILTER
HUE
HUE CONT.
CHROMA VCO
PHASE SHIFT
IREFY
OSD BLK CONT.
CONTRAST CONT.
ORGBP
ON SCREEN DISPLAY
DY COL
NEW DYNAMIC COLOR
BRIGHTNESS
BRIGHT-NESS CONT.
G CUT OFF
G AMP
B AMP
B CUT OFF
IK
IK DET
RGB DRIVE AMP
DC LEVEL SHIFT
P MUTE
OFF NR
OFF NG
OFF NS
BLK CONT.
LEAKAGE COMPENSATION
BLK
S/H
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
21
23
24
25
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42
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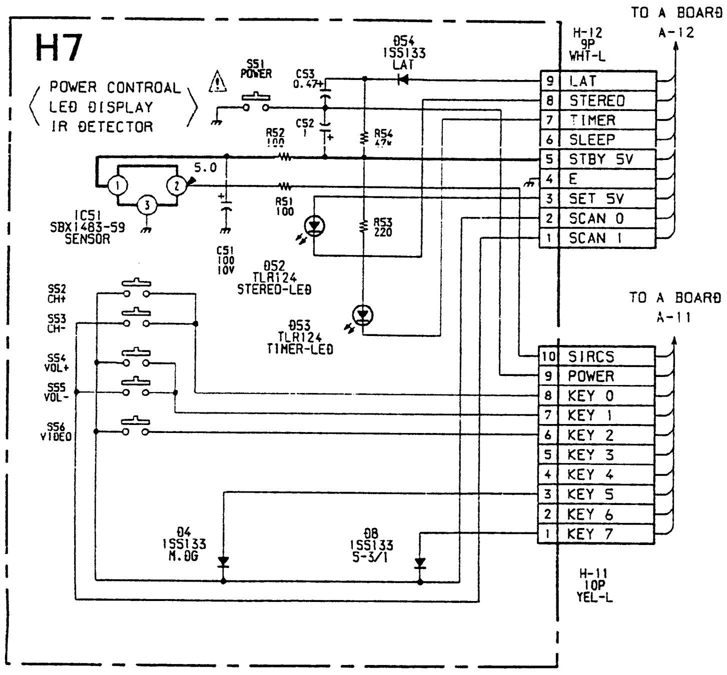
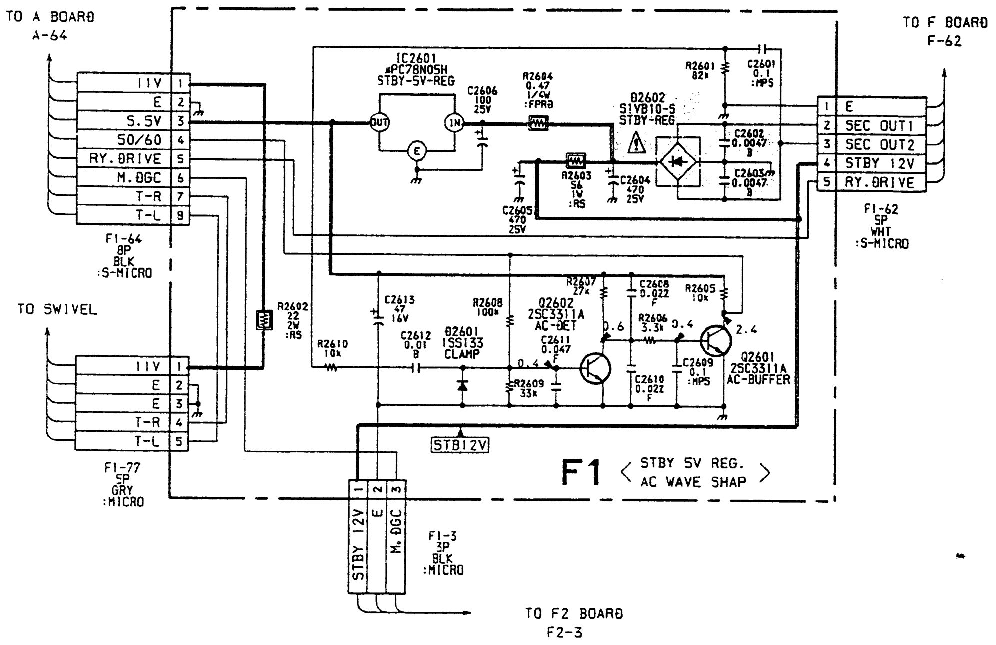
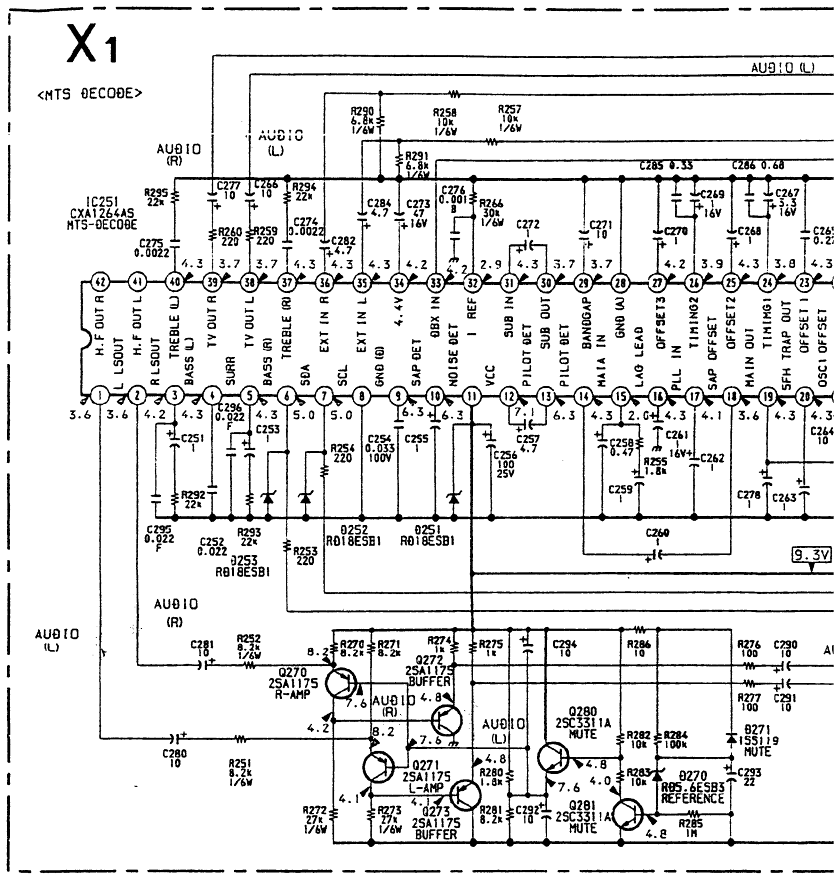
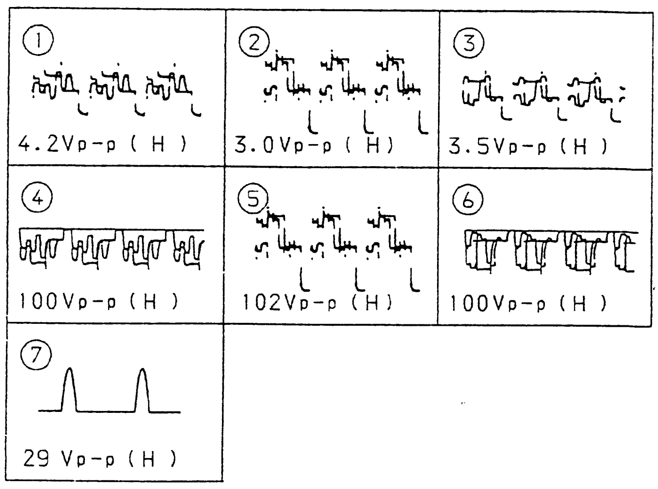
46
47
48

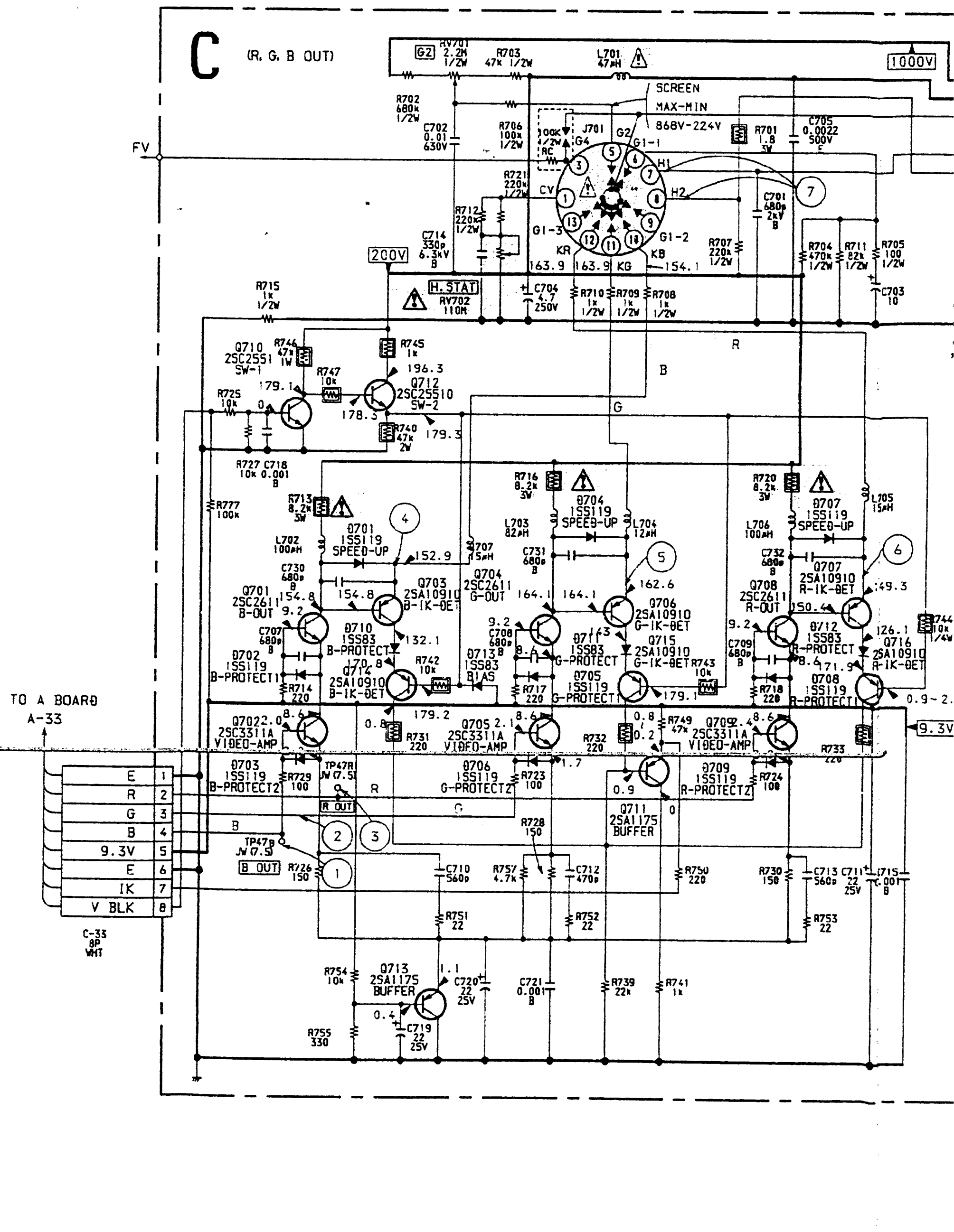

H7
POWER CONTROAL
LED DISPLAY
IR DETECTOR
TO A BOARD A-12
H-12 9P WHT-L
LAT
STEREO
TIMER
SLEEP
STBY 5V
E
SET 5V
SCAN 0
SCAN 1
TO A BOARD A-11
SIRCS
POWER
KEY 0
KEY 1
KEY 2
KEY 3
KEY 4
KEY 5
KEY 6
KEY 7
H-11 10P YEL-L
IC51 SBX1483-59 SENSOR
D52 TLR124 STEREO-LED
D53 TLR124 TIMER-LED
S52 CH+
S53 CH-
S54 VOL+
S55 VOL-
S56 VIDEO

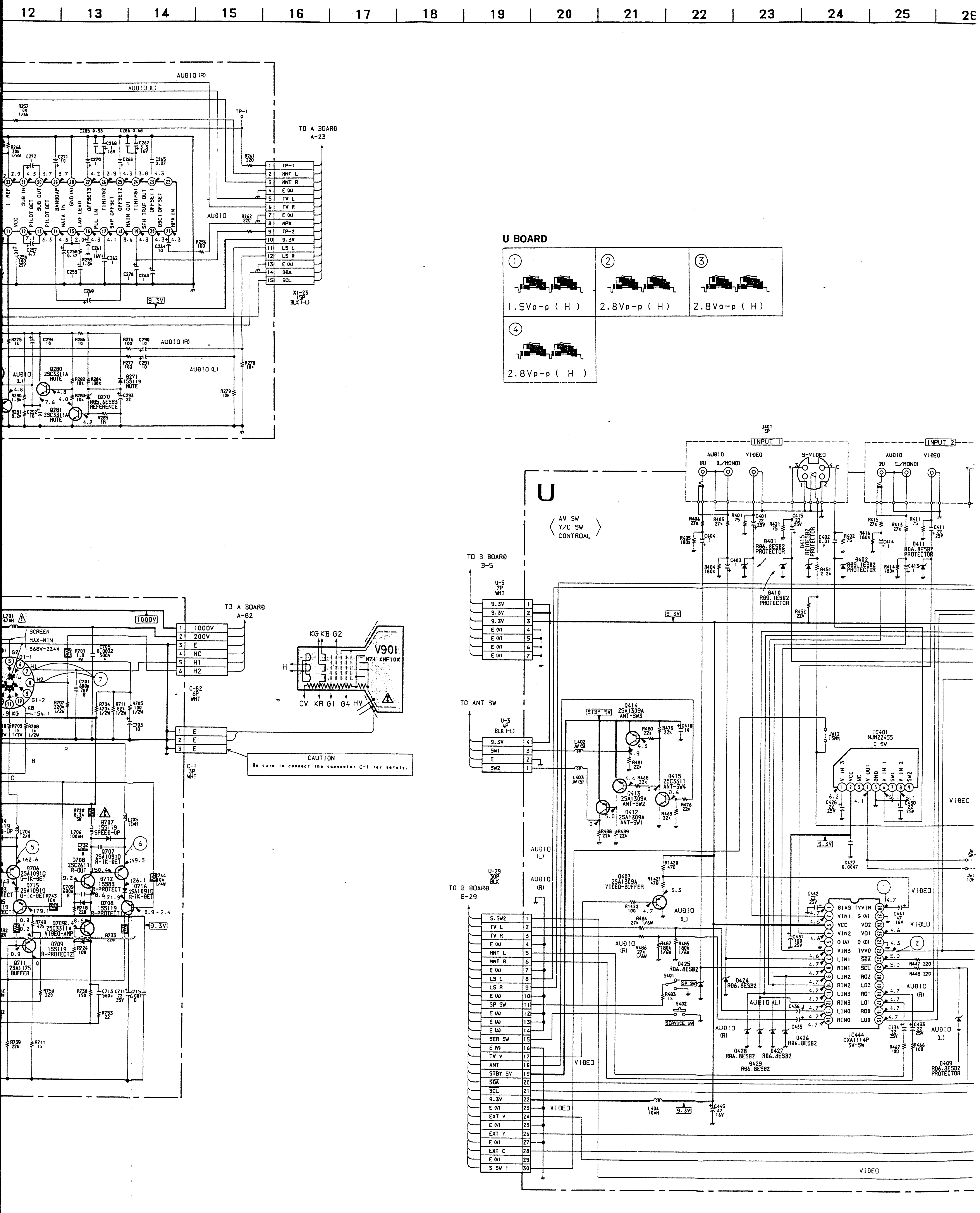

TO A BOARD A-64
11V
E
S.5V
50/60
RY.DRIVE
M.DGC
T-R
T-L
F1-64 8P BLK :S-MICRO
TO SWIVEL
F1-77 5P GRY :MICRO
IC2601 μPC78N05H STBY-5V-REG
D2602 S1VB10-5 STBY-REG
Q2602 2SC3311A AC-DET
D2601 1SS133 CLAMP
Q2601 2SC3311A AC-BUFFER
TO F BOARD F-62
SEC OUT1
SEC OUT2
STBY 12V
RY.DRIVE
F1-62 5P WHT :S-MICRO
STB12V
F1
STBY 5V REG.
AC WAVE SHAP
STBY 12V
M.DGC
F1-3 3P BLK :MICRO
TO F2 BOARD F2-3

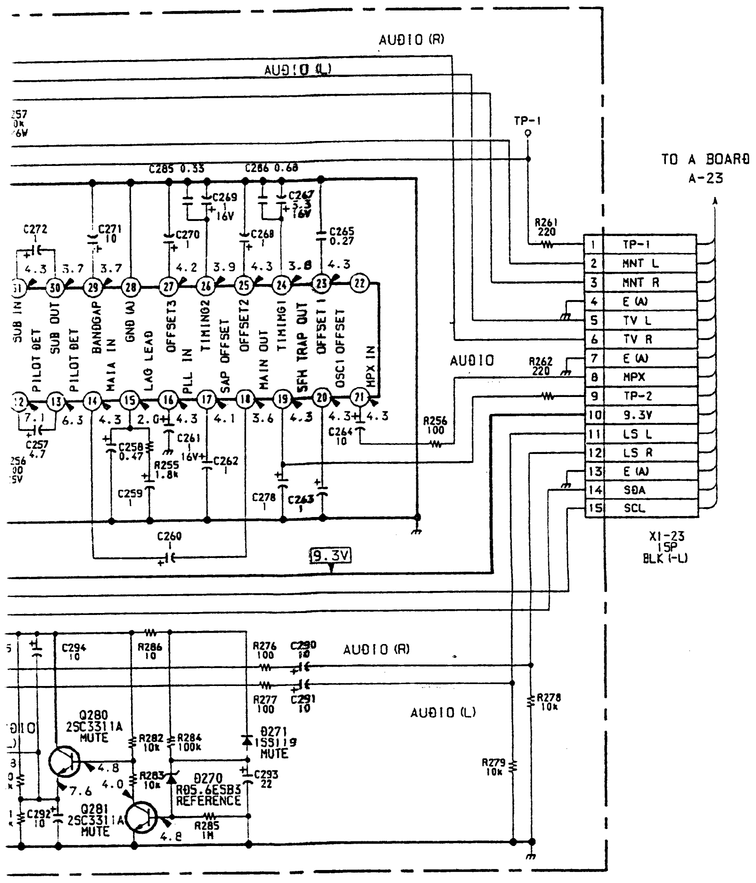

X1
<MTS DECODE>
IC251 CXA1264AS MTS-DECODE
AUDIO (R)
AUDIO (L)
Q270 2SA1175 R-AMP
Q272 2SA1175 BUFFER
Q271 2SA1175 L-AMP
Q273 2SA1175 BUFFER
Q280 2SC3311A MUTE
Q281 2SC3311A MUTE
D270 RD5.6ESB3 REFERENCE
D271 1SS119 MUTE
D252 RD18ESB1
D251 RD18ESB1
D253 RD18ESB1
9.3V

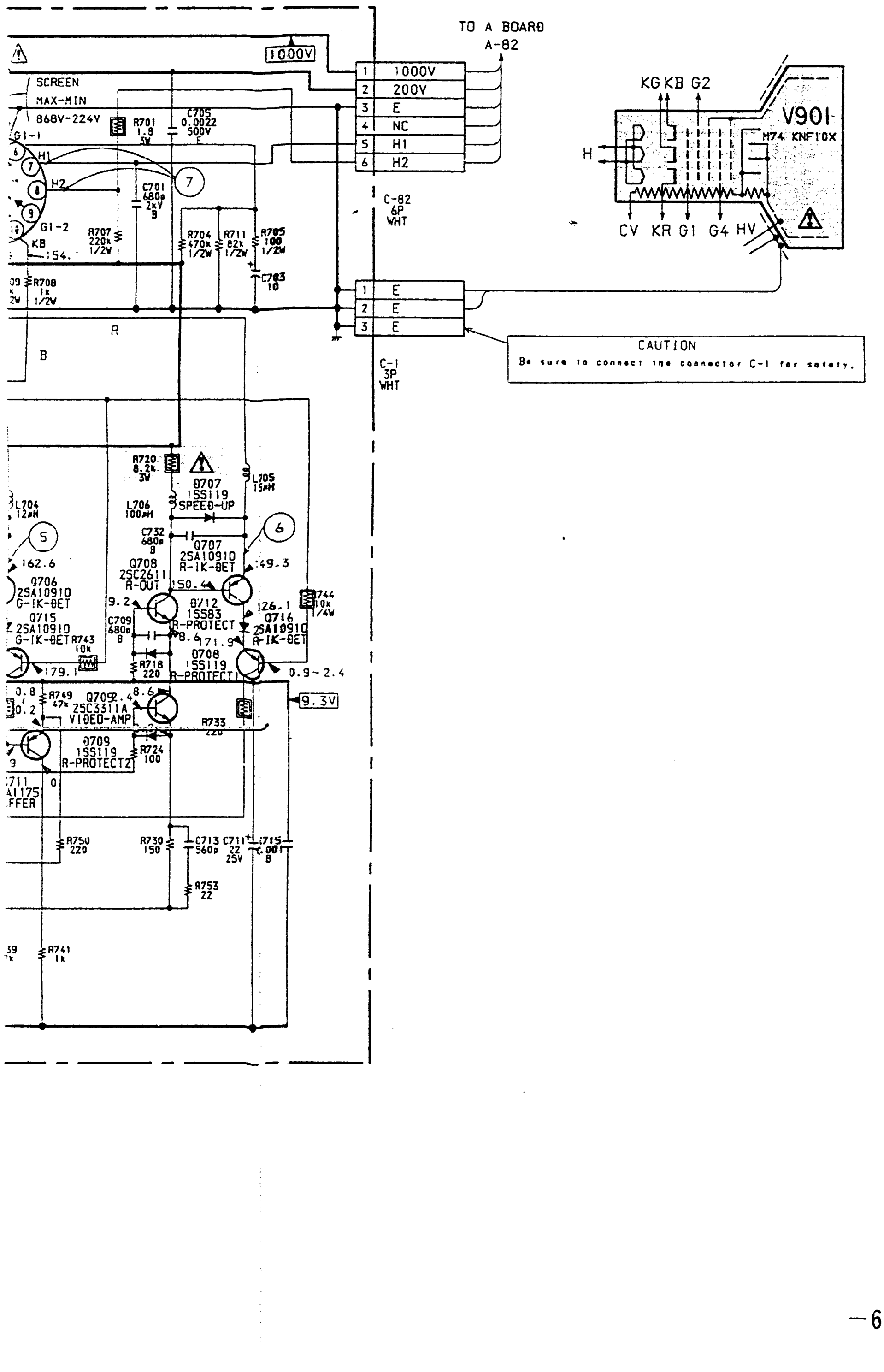
C Board


①
4.2Vp-p (H)
②
3.0Vp-p (H)
③
3.5Vp-p (H)
④
100Vp-p (H)
⑤
102Vp-p (H)
⑥
100Vp-p (H)
⑦
29 Vp-p (H)

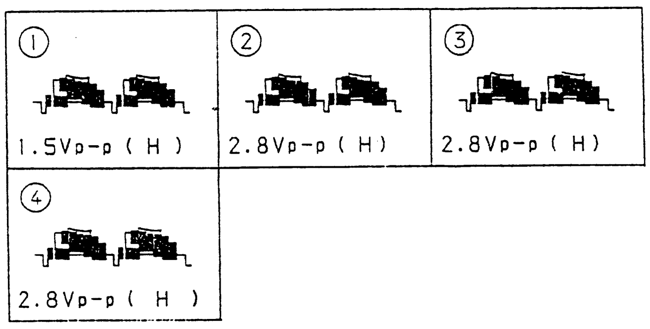

C
(R, G, B OUT)
FV
G2
1000V
SCREEN
MAX-MIN
868V-224V
200V
H.STAT RV702 110M
J701
Q710 2SC2551 SW-1
Q712 2SC2551 SW-2
Q701 2SC2611 B-OUT
Q703 2SC2611 G-OUT
Q708 2SC2611 R-OUT
D701 1SS119 SPEED-UP
D704 1SS119 SPEED-UP
D707 1SS119 SPEED-UP
Q704 2SA1091 B-IK-DET
Q706 2SA1091 G-IK-DET
Q707 2SA1091 R-IK-DET
Q702 2SC3311A VIDEO-AMP
Q705 2SC3311A VIDEO-AMP
Q709 2SC3311A VIDEO-AMP
Q711 2SA1175 BUFFER
Q713 2SA1175 BUFFER
TO A BOARD A-33
E
R
G
B
9.3V
E
IK
V BLK
C-33 8P WHT
9.3V

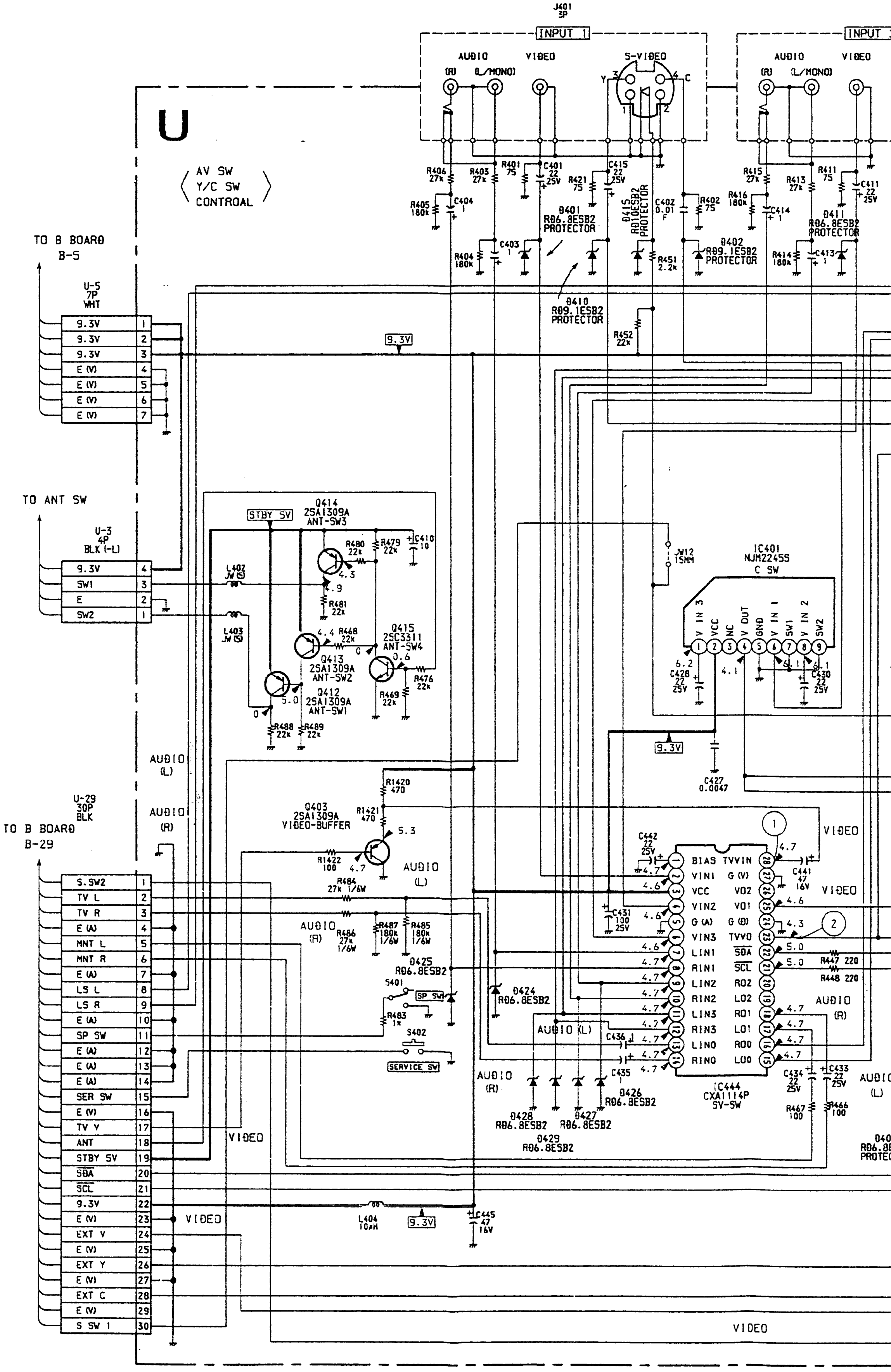

12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
AUDIO (R)
AUDIO (L)
TP-1
TO A BOARD
A-23
TP-1
MNT L
MNT R
E (A)
TV L
TV R
E (A)
MPX
TP-2
9.3V
LS L
LS R
E (A)
SDA
SCL
X1-23
15P
BLK (-L)
AUDIO
9.3V
SUB IN
SUB OUT
PILOT DET
BANDGAP
MAIN IN
GND (A)
LAG LEAD
PLL IN
OFFSET3
TIMING2
SAP OFFSET
OFFSET2
MAIN OUT
TIMING1
5FH TRAP OUT
OSC1 OFFSET
MPX IN
VCC
AUDIO (L)
Q280
2SC3311A
MUTE
Q281
2SC3311A
MUTE
Q270
RD5.6ESB3
REFERENCE
Q271
1SS119
MUTE
U BOARD
1.5Vp-p (H)
2.8Vp-p (H)
2.8Vp-p (H)
2.8Vp-p (H)
TO A BOARD
A-82
1000V
1000V
200V
E
NC
H1
H2
C-82
6P
WHT
SCREEN
MAX-MIN
868V-224V
KG KB G2
V901
M74 KNF10X
H
CV KR G1 G4 HV
E
E
E
C-1
3P
WHT
CAUTION
Be sure to connect the connector C-1 for safety.
Q707
1SS119
SPEED-UP
Q706
2SA1091O
G-IK-BET
Q715
2SA1091O
G-IK-BET
Q708
2SC2611
R-OUT
Q707
2SA1091O
R-IK-BET
Q712
1SS83
R-PROTECT
Q716
2SA1091O
R-IK-BET
Q708
1SS119
R-PROTECT1
Q705
2SC3311A
VIDEO-AMP
Q709
1SS119
R-PROTECT2
Q711
2SA1175
BUFFER
9.3V
J401
3P
INPUT 1
INPUT 2
AUDIO
VIDEO
S-VIDEO
(R)
(L/MONO)
U
AV SW
Y/C SW
CONTROAL
TO B BOARD
B-5
U-5
7P
WHT
9.3V
9.3V
9.3V
E (V)
E (V)
E (V)
E (V)
D401
RD6.8ESB2
PROTECTOR
D415
RD10ESB2
PROTECTOR
D402
RD9.1ESB2
PROTECTOR
D410
RD9.1ESB2
PROTECTOR
D411
RD6.8ESB2
PROTECTOR
TO ANT SW
U-3
4P
BLK (-L)
9.3V
SW1
E
SW2
STBY 5V
Q414
2SA1309A
ANT-SW3
Q415
2SC3511
ANT-SW4
Q413
2SA1309A
ANT-SW2
Q412
2SA1309A
ANT-SW1
JW12
15MM
IC401
NJM2245S
C SW
V IN 1
VCC
NC
V OUT
GND
V IN 1
SW1
V IN 2
SW2
VIDEO
AUDIO (L)
AUDIO (R)
Q403
2SA1309A
VIDEO-BUFFER
TO B BOARD
B-29
U-29
30P
BLK
S.SW2
TV L
TV R
E (A)
MNT L
MNT R
E (A)
LS L
LS R
E (A)
SP SW
E (A)
E (A)
E (A)
SER SW
E (V)
TV V
ANT
STBY 5V
SDA
SCL
9.3V
E (V)
EXT V
E (V)
EXT Y
E (V)
EXT C
E (V)
S SW 1
D425
RD6.8ESB2
S401
SP SW
S402
SERVICE SW
D424
RD6.8ESB2
D428
RD6.8ESB2
D427
RD6.8ESB2
D426
RD6.8ESB2
D429
RD6.8ESB2
BIAS TVVIN
VIN1 G (V)
VCC VO2
VIN2 VO1
G (A) G (B)
VIN3 TVVO
LIN1 SDA
RIN1 SCL
LIN2 RO2
RIN2 LO2
LIN3 RO1
RIN3 LO1
LINO ROO
RINO LOO
IC444
CXA1114P
SV-SW
D409
RD6.8ESB2
PROTECTOR
L404
10μH
9.3V
C445
47
16V
VIDEO


AUDIO (R)
AUDIO (L)
TP-1
TO A BOARD
A-23
TP-1
MNT L
MNT R
E (A)
TV L
TV R
E (A)
MPX
TP-2
9.3V
LS L
LS R
E (A)
SDA
SCL
X1-23
15P
BLK (-L)
AUDIO
9.3V
AUDIO (R)
AUDIO (L)
Q280
2SC3311A
MUTE
Q281
2SC3311A
MUTE
Q270
RD5.6ESB3
REFERENCE
Q271
1SS119
MUTE
PILOT DET
SUB OUT
BANDGAP
MAIN IN
GND (A)
LAG LEAD
OFFSET3
PLL IN
TIMING2
SAP OFFSET
OFFSET2
MAIN OUT
TIMING1
SFM TRAP OUT
OFFSET1
OSC1 OFFSET
MPX IN

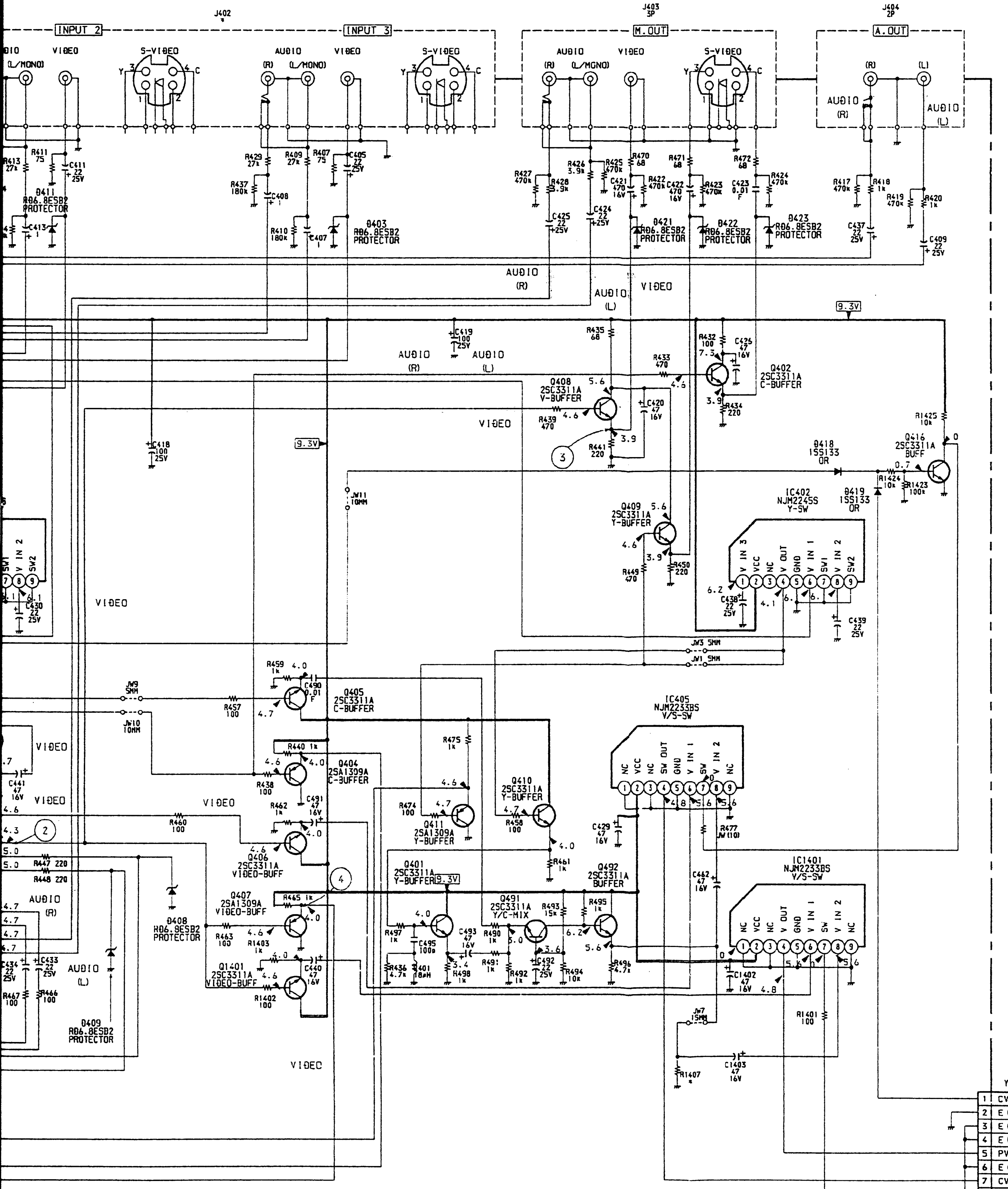

TO A BOARD
A-82
1000V
1000V
200V
E
NC
H1
H2
C-82
6P
WHT
SCREEN
MAX-MIN
868V-224V
KG KB G2
V901
M74 KNF10X
CV KR G1 G4 HV
E
E
E
C-1
3P
WHT
CAUTION
Be sure to connect the connector C-1 for safety.
Q707
1SS119
SPEED-UP
Q707
2SA1091O
R-1K-BET
Q708
2SC2611
R-OUT
Q706
2SA1091O
G-1K-BET
Q715
2SA1091O
G-1K-BET
Q712
1SS83
R-PROTECT
Q716
2SA1091O
R-1K-BET
Q708
1SS119
R-PROTECT
Q705
2SC3311A
VIDEO-AMP
Q709
1SS119
R-PROTECT
9.3V

U BOARD

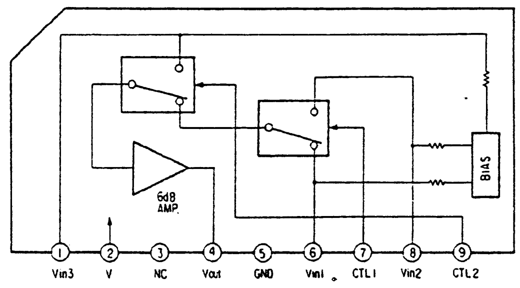

①
1.5Vp-p (H)
②
2.8Vp-p (H)
③
2.8Vp-p (H)
④
2.8Vp-p (H)


J401
3P
INPUT 1
AUDIO
(R)
(L/MONO)
VIDEO
S-VIDEO
INPUT
AUDIO
(R)
(L/MONO)
VIDEO
U
AV SW
Y/C SW
CONTROAL
TO B BOARD
B-5
U-5
7P
WHT
9.3V
9.3V
9.3V
E (V)
E (V)
E (V)
E (V)
D401
RD6.8ESB2
PROTECTOR
D402
RD9.1ESB2
PROTECTOR
D410
RD9.1ESB2
PROTECTOR
D411
RD6.8ESB2
PROTECTOR
TO ANT SW
U-3
4P
BLK (-L)
9.3V
SW1
E
SW2
STBY SV
Q414
2SA1309A
ANT-SW3
Q415
2SC3311
ANT-SW4
Q413
2SA1309A
ANT-SW2
Q412
2SA1309A
ANT-SW1
IC401
NJM2245S
C SW
Q403
2SA1309A
VIDEO-BUFFER
TO B BOARD
B-29
U-29
30P
BLK
S.SW2
TV L
TV R
E (A)
MNT L
MNT R
E (A)
LS L
LS R
E (A)
SP SW
E (A)
E (A)
E (A)
SER SW
E (V)
TV Y
ANT
STBY SV
SDA
SCL
9.3V
E (V)
EXT Y
E (V)
EXT Y
E (V)
EXT C
E (V)
S SV 1
AUDIO (L)
AUDIO (R)
VIDEO
SP SW
SERVICE SW
IC444
CXA1114P
SV-SW
Q424
RD6.8ESB2
Q425
RD6.8ESB2
Q426
RD6.8ESB2
Q427
RD6.8ESB2
Q428
RD6.8ESB2
Q429
RD6.8ESB2
BIAS TVVIN
VIN1 G (V)
VCC VO2
VIN2 VO1
G (A) G (D)
VIN3 TVVO
LIN1 SDA
RIN1 SCL
LIN2 RO2
RIN2 LO2
LIN3 RO1
RIN3 LO1
LINO ROO
RINO LOO
9.3V
VIDEO

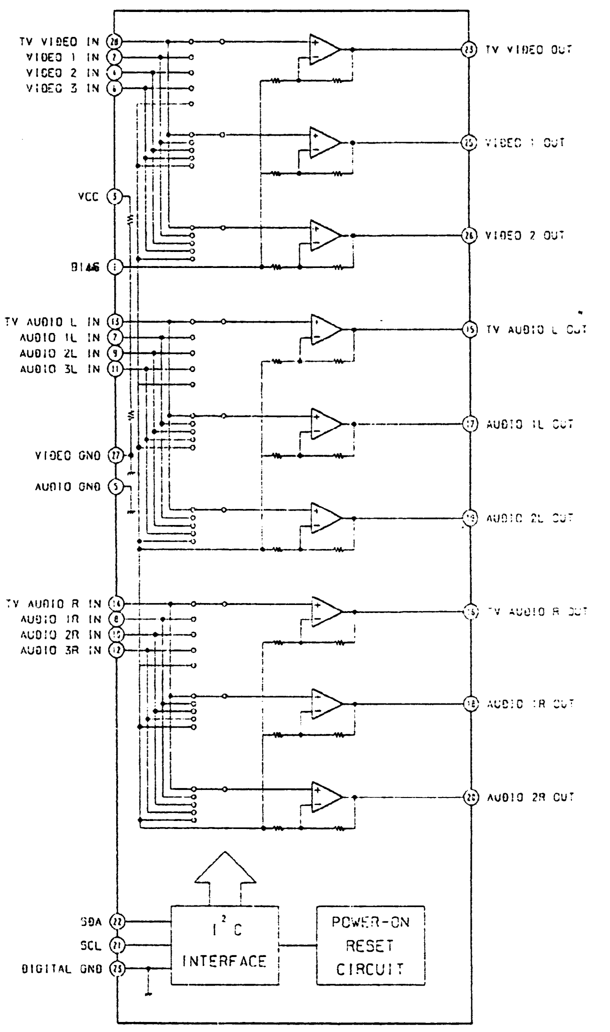
25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35


INPUT 2
J402
INPUT 3
J403 3P
M.OUT
J404 2P
A.OUT
AUDIO (L/MONO)
VIDEO
S-VIDEO
AUDIO (R)
AUDIO (L)
D411 RD6.8ESB2 PROTECTOR
D403 RD6.8ESB2 PROTECTOR
D421 RD6.8ESB2 PROTECTOR
D422 RD6.8ESB2 PROTECTOR
D423 RD6.8ESB2 PROTECTOR
9.3V
Q408 2SC3311A Y-BUFFER
Q402 2SC3311A C-BUFFER
Q409 2SC3311A Y-BUFFER
Q416 2SC3311A BUFF
D418 1SS133 OR
D419 1SS133 OR
IC402 NJM2245S Y-SW
Q405 2SC3311A C-BUFFER
Q404 2SA1309A C-BUFFER
Q406 2SC3311A VIDEO-BUFF
Q407 2SA1309A VIDEO-BUFF
Q1401 2SC3311A VIDEO-BUFF
D408 RD6.8ESB2 PROTECTOR
D409 RD6.8ESB2 PROTECTOR
Q410 2SC3311A Y-BUFFER
Q411 2SA1309A Y-BUFFER
Q401 2SC3311A Y-BUFFER
Q491 2SC3311A Y/C-MIX
Q492 2SC3311A BUFFER
IC405 NJM2233BS V/S-SW
IC1401 NJM2233BS V/S-SW
TO P BOARD P-4
U-4 8P YEL (-L)
1 CV I
2 E (A)
3 E (V)
4 E (V)
5 PV OUT
6 E (V)
7 CV OUT
8 E (V)

U BOARD IC401,402 NJM2245S


6dB AMP
BIAS
1 Vin3
2 V+
3 NC
4 Vout
5 GND
6 Vin1
7 CTL1
8 Vin2
9 CTL2

U BOARD IC444 CXA1114P


TV VIDEO IN
VIDEO 1 IN
VIDEO 2 IN
VIDEO 3 IN
VCC
BIAS
TV AUDIO L IN
AUDIO 1L IN
AUDIO 2L IN
AUDIO 3L IN
VIDEO GND
AUDIO GND
TV AUDIO R IN
AUDIO 1R IN
AUDIO 2R IN
AUDIO 3R IN
SDA
SCL
DIGITAL GND
TV VIDEO OUT
VIDEO 1 OUT
VIDEO 2 OUT
TV AUDIO L OUT
AUDIO 1L OUT
AUDIO 2L OUT
TV AUDIO R OUT
AUDIO 1R OUT
AUDIO 2R OUT
I²C INTERFACE
POWER-ON RESET CIRCUIT

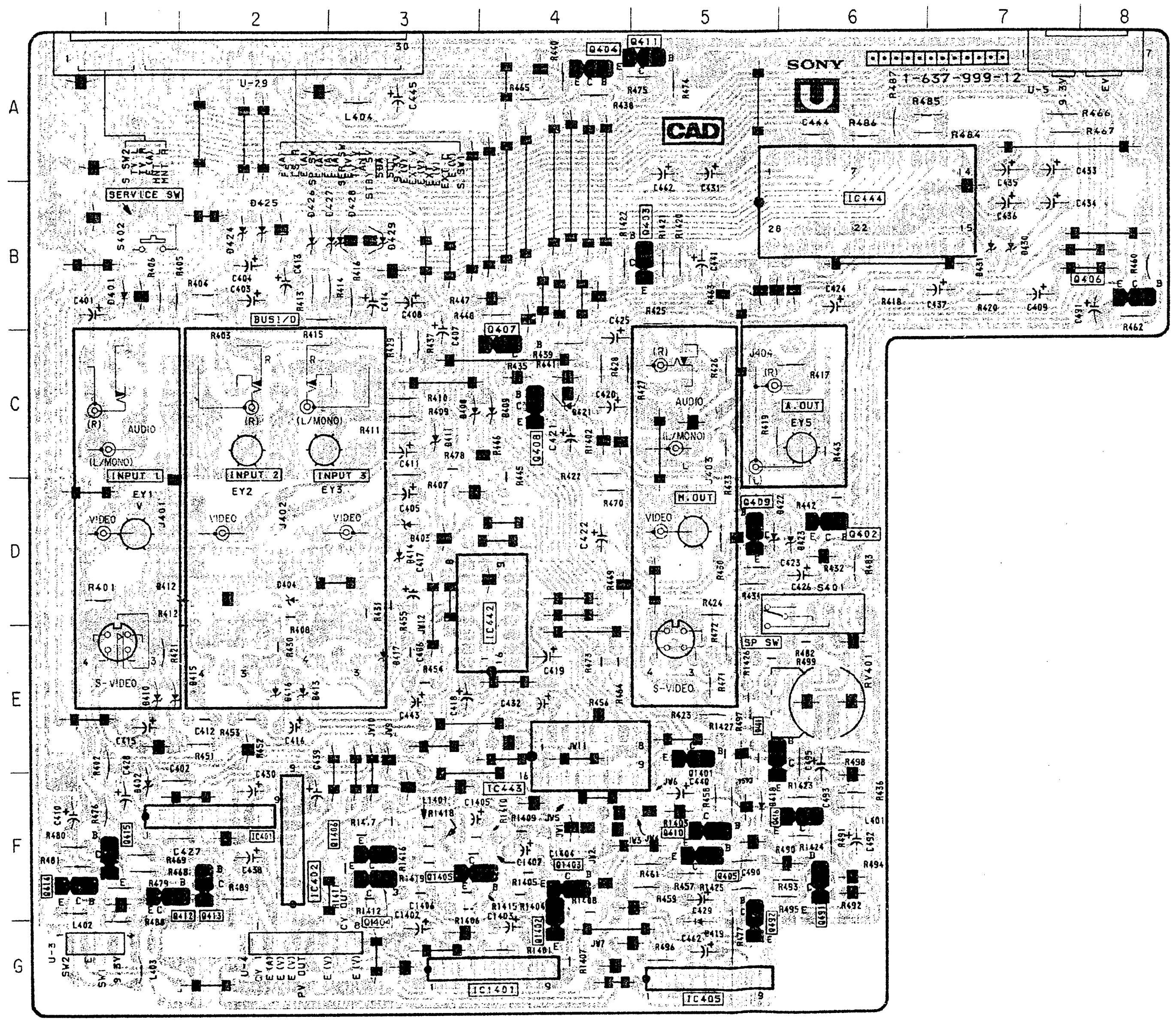
[AV SW Y/C SW CONTROL] **U** **H7** [POWER CONTROL LED DISPLAY IR DETECTOR] **X1** [MTS DECODE] **C** [R.

– U Board –

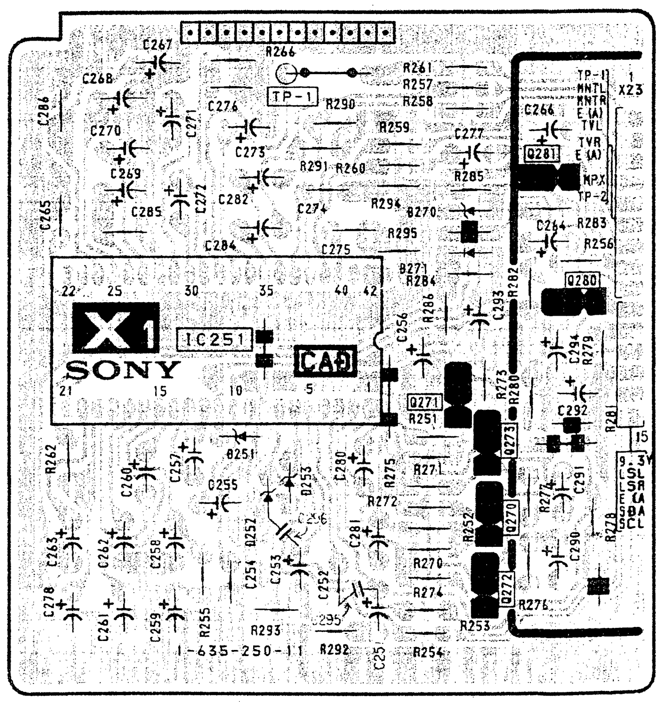
IC	
IC401	F-2
IC402	F-2
IC405	G-5
IC444	B-6
IC1401	G-4

TRANSISTOR	
Q401	E-6
Q402	D-6
Q403	B-5
Q404	A-4
Q405	F-5
Q406	B-8
Q407	C-4
Q408	C-4
Q409	D-5
Q410	F-5
Q411	A-5
Q412	F-1
Q413	F-2
Q414	F-1
Q415	F-1
Q416	F-6
Q491	F-6
Q492	G-5
Q1401	E-5

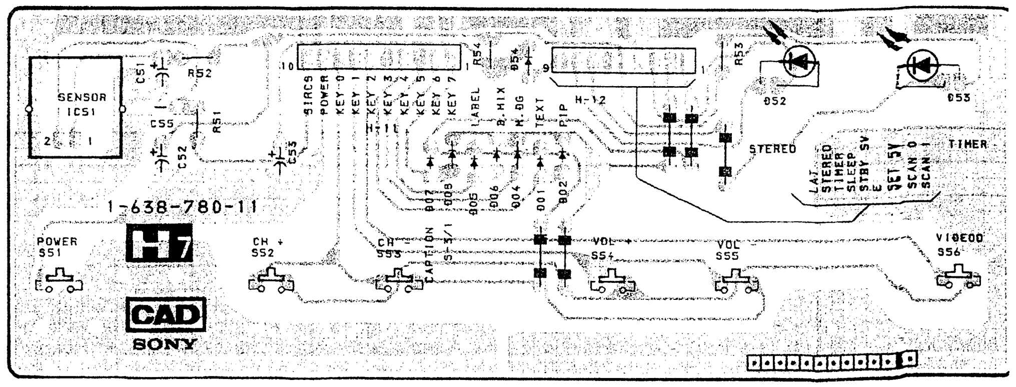
DIODE	
D401	B-1
D402	F-1
D403	D-3
D408	C-3
D409	C-4
D410	E-1
D411	C-3
D415	E-1
D418	F-5
D419	G-5
D421	C-4
D422	D-6
D423	D-6
D424	B-2
D425	B-2
D426	B-2
D427	B-3
D428	B-3
D429	B-3


1
2
3
4
5
6
7
8
A
B
C
D
E
F
G
SONY
U
1-637-999-12
CAD
SERVICE SW
BUS I/O
INPUT 1
INPUT 2
INPUT 3
AUDIO
VIDEO
S-VIDEO
(R)
(L/MONO)
EY1
EY2
EY3
EY5
M.OUT
A.OUT
SP SW
IC444
IC442
IC443
IC402
IC401
IC1401
IC405
RV401

– X1 Board –


X1
SONY
IC251
CAD
TP-1
1-635-250-11
22
25
30
35
40
42
21
15
10
5
1
TP-1
MNTL
MNTR
E (A)
TVL
TVR
E (A)
MPX
TP-4
X23
9.3V
SDA
SCL

– H7 Board –


SENSOR
IC51
1-638-780-11
H7
CAD
SONY
POWER
S51
CH +
S52
CH –
S53
VOL –
S54
VOL +
S55
VIDEO
S56
STEREO
TIMER
D52
D53

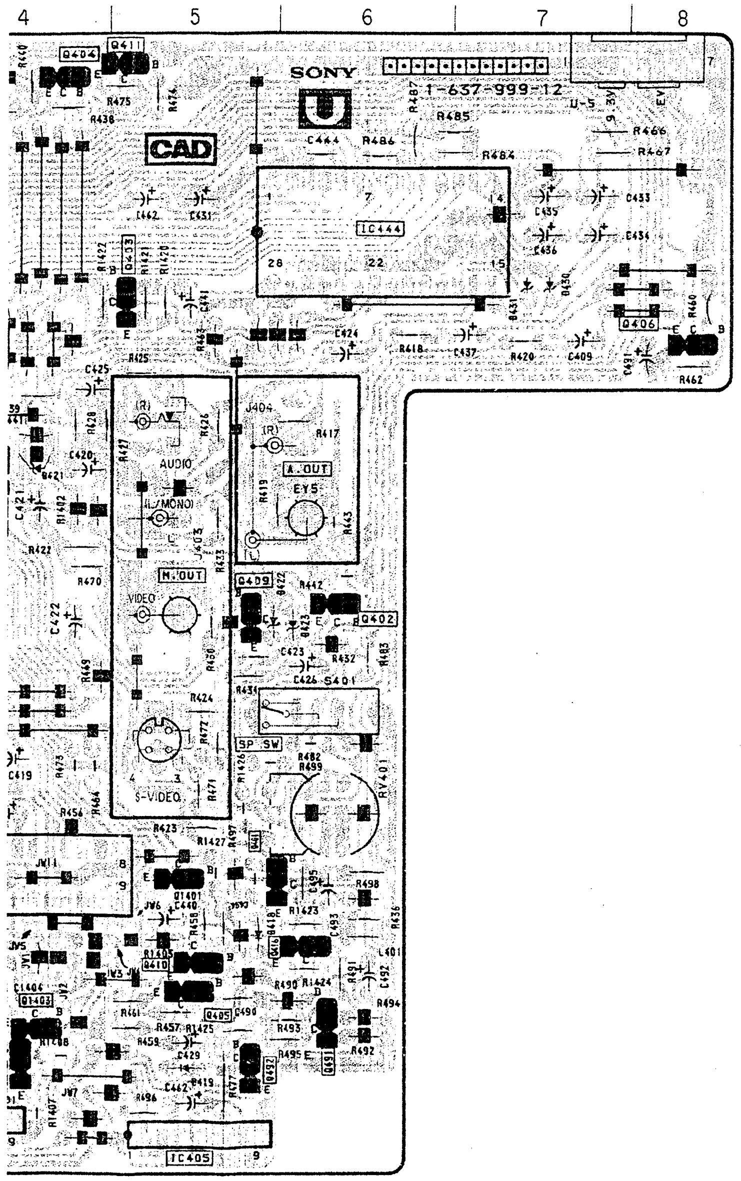
[AV SW Y/C SW CONTROL] **U**

H7 [POWER CONTROL LED DISPLAY IR DETECTOR]

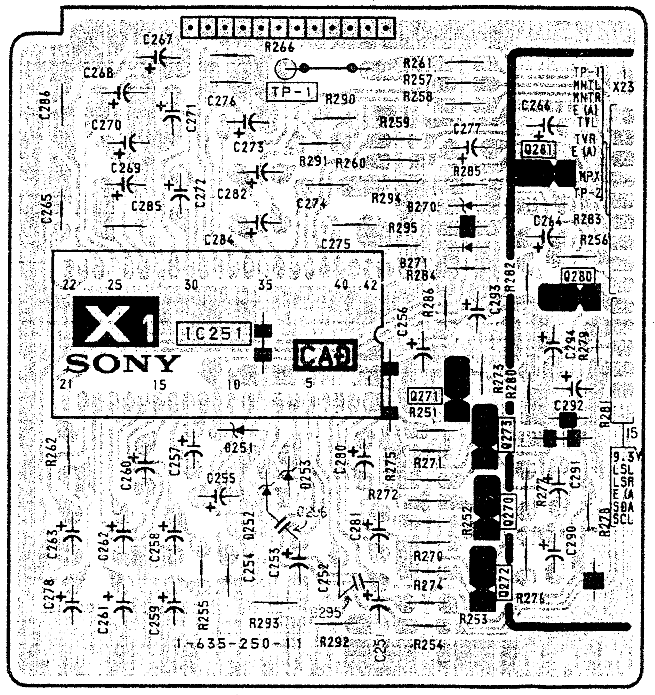
X1 [MTS DECODE]

C [R. G. B. OUT]

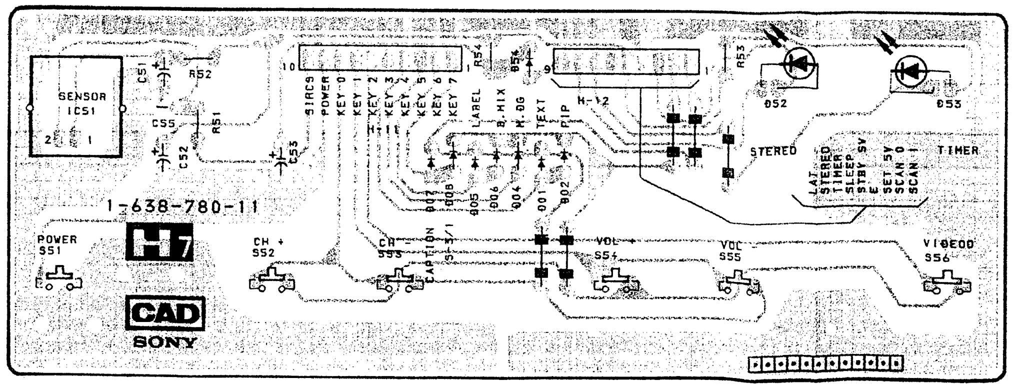
F1 [STBY 5V REG. AC WAVE SHAP]


4
5
6
7
8
SONY
U
CAD
1-637-999-12
IC444
IC405
AUDIO
MONO
VIDEO
S-VIDEO
EYS
A.OUT
M.OUT
RV401
S401
SP SW

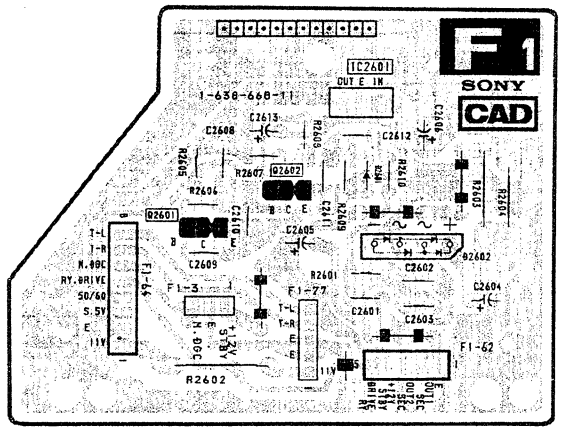
– X1 Board –


X1
SONY
CAD
IC251
TP-1
1-635-250-11
X23
TP-1
MNTL
CNTR
TVL
TVR
MPX
TP-2
9.3V
LSL
LSR
SDA
SCL

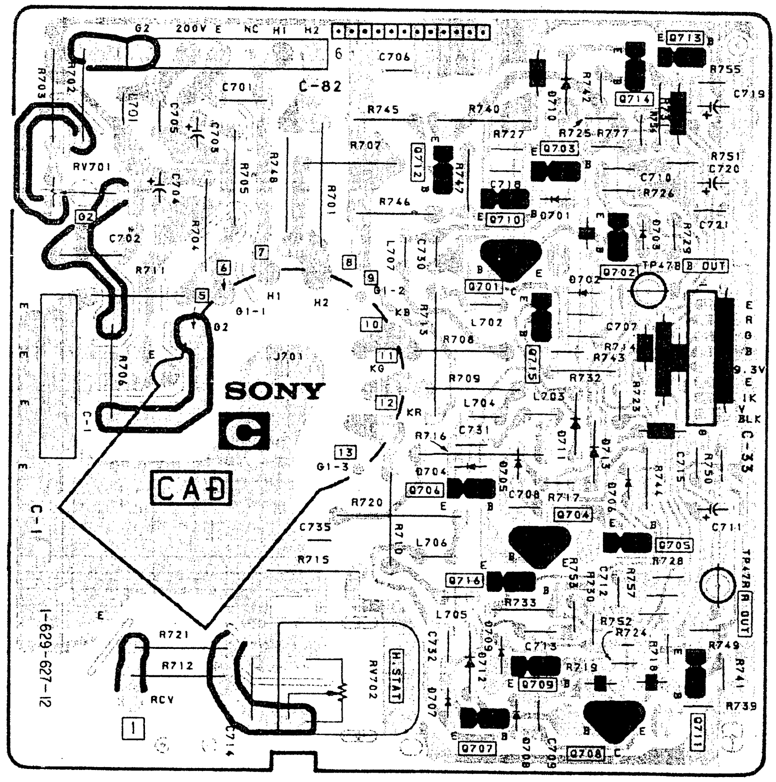
– H7 Board –

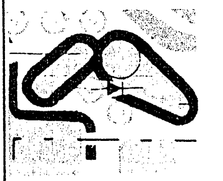

SENSOR
IC51
1-638-780-11
H7
CAD
SONY
POWER
S51
CH +
S52
CH -
S53
VOL -
S54
VOL +
S55
VIDEO
S56
STEREO
TIMER
D52
D53
H-12

– F1 Board –

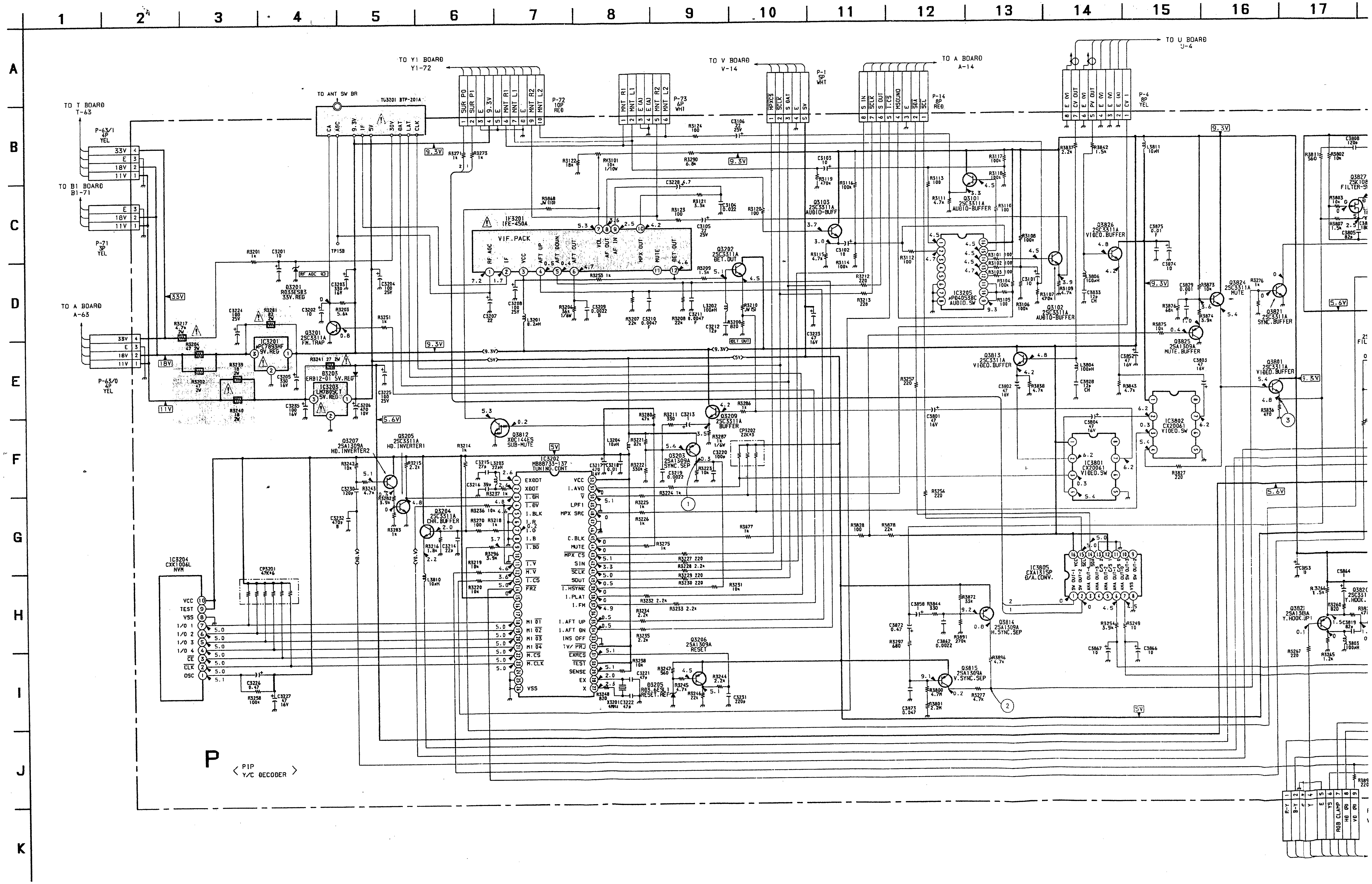

F1
SONY
CAD
1-638-668-11
IC2601
F1-3
F1-62
F1-77
R2602

– C Board –

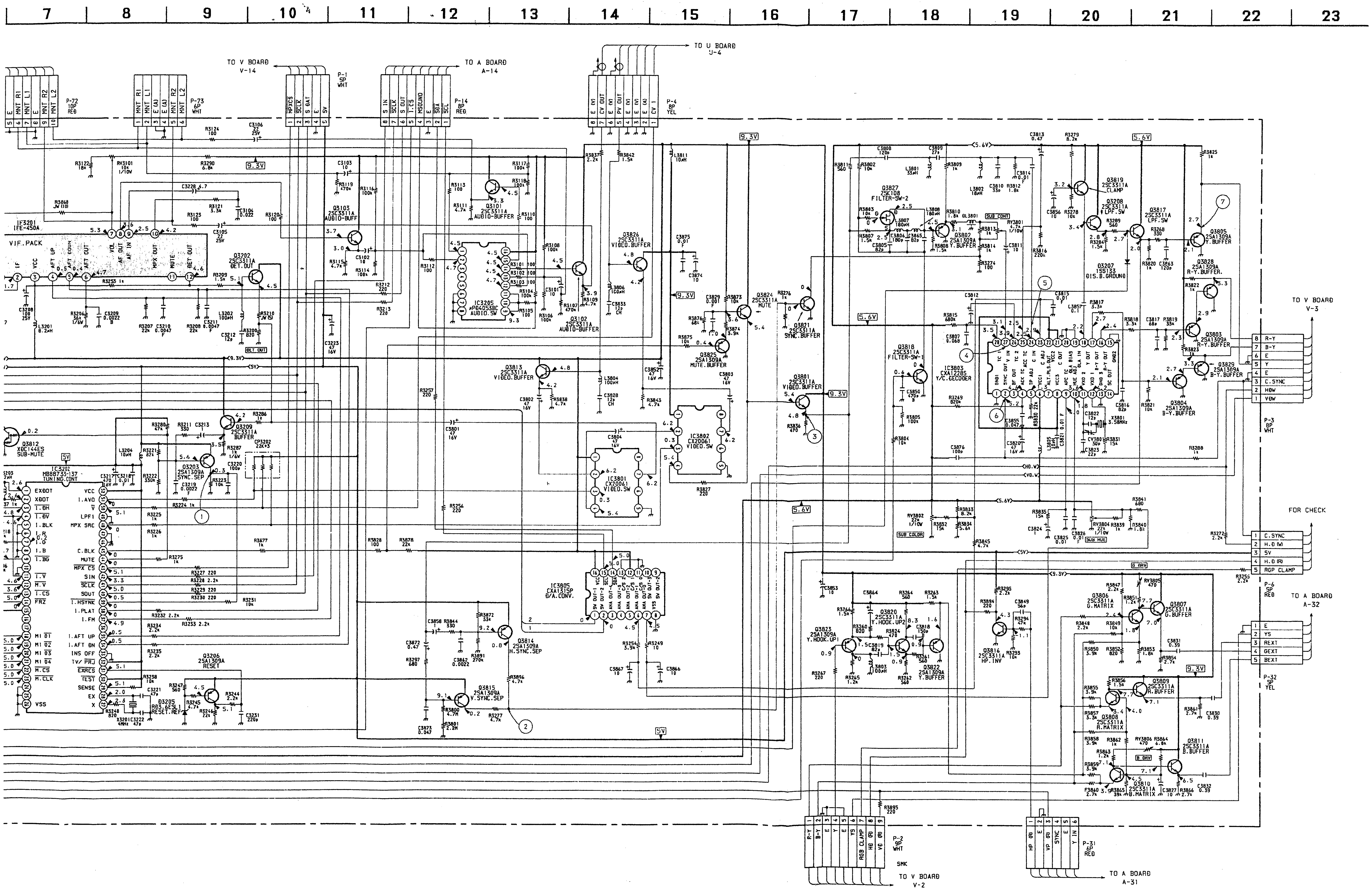

SONY
C
CAD
C-82
C-1
C-33
J701
RV701
RV702
H.STAT
1-629-627-12
200V
G2
KG
KR
KB
RCV



NOTE:
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.


P
PIP
Y/C DECODER
TO T BOARD
T-63
P-63/1
4P
YEL
TO B1 BOARD
B1-71
P-71
3P
YEL
TO A BOARD
A-63
P-63/D
4P
YEL
TO ANT SW BR
TL3201 BTP-201A
TO Y1 BOARD
Y1-72
P-72
10P
RED
P-73
6P
WHT
TO V BOARD
V-14
P-1
4P
WHT
TO A BOARD
A-14
P-14
8P
RED
TO U BOARD
U-4
P-4
8P
YEL
IF3201
IFE-450A
VIF.PACK
IC3201
μPC7893HF
9V.REG
IC3203
LM7805CT
5V.REG
Q3201
RD33ESB3
33V.REG
Q3201
2SC3311A
FM.TRAP
Q3203
ERB12-01 5V.REG
Q3202
2SC3311A
DET.OUT
Q3103
2SC3311A
AUDIO-BUFF
Q3101
2SC3311A
AUDIO-BUFFER
Q3102
2SC3311A
AUDIO-BUFFER
IC3205
μPC4053BC
AUDIO.SW
Q3826
2SC3311A
VIDEO.BUFFER
Q3824
2SC3311A
MUTE
Q3821
2SC3311A
SYNC.BUFFER
Q3825
2SA1309A
MUTE.BUFFER
Q3813
2SC3311A
VIDEO.BUFFER
Q3801
2SC3311A
VIDEO.BUFFER
IC3802
CX20061
VIDEO.SW
IC3801
CX20061
VIDEO.SW
Q3812
XDC144ES
SUB-MUTE
Q3209
2SC3311A
BUFFER
Q3203
2SA1309A
SYNC.SEP
Q3207
2SA1309A
HD.INVERTER2
Q3205
2SC3311A
HD.INVERTER1
Q3204
2SC3311A
CHR.BUFFER
IC3202
MB88733-137
TUNING.CONT
IC3204
CXK1006L
NVM
CP3201
47K×6
Q3206
2SA1309A
RESET
Q3205
RD5.6ESL 1
RESET.REF
IC3805
CXA1315P
D/A.CONV.
Q3814
2SA1309A
H.SYNC.SEP
Q3815
2SA1309A
V.SYNC.SEP
Q3821
2SA1309A
Y.HOOK.JP1
Q3827
2SC108
FILTER-S

KV-29XBR85
RM-Y108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22
23
TO V BOARD V-14
TO A BOARD A-14
TO U BOARD U-4
P-72 10P RED
P-73 6P WHT
P-1 5P WHT
P-14 8P RED
P-4 8P YEL
IF3201 IFE-450A
VIF.PACK
Q3202 2SC3311A DET.OUT
Q3103 2SC3311A AUDIO-BUFF
Q3101 2SC3311A AUDIO-BUFFER
IC3205 μPC4055BC AUDIO.SW
Q3102 2SC3311A AUDIO-BUFFER
Q3826 2SC3311A VIDEO.BUFFER
Q3824 2SC3311A MUTE
Q3825 2SA1309A MUTE.BUFFER
Q3821 2SC3311A SYNC.BUFFER
Q3827 2SK108 FILTER-SW-2
Q3802 2SA1309A Y.BUFFER
Q3819 2SC3311A CLAMP
Q3208 2SC3311A LPF.SW
Q3817 2SC3311A LPF.SW
Q3805 2SC3311A Y.BUFFER
Q3828 2SA1309A R-Y.BUFFER
Q3207 1SS133 DIS.B.GROUND
Q3803 2SA1309A R-Y.BUFFER
Q3829 2SA1309A B-Y.BUFFER
Q3804 2SA1309A B-Y.BUFFER
Q3818 2SC3311A FILTER-SW-1
IC3803 CXA1228S Y/C.DECODER
X3801 3.58MHz
Q3813 2SC3311A VIDEO.BUFFER
Q3801 2SC3311A VIDEO.BUFFER
IC3802 CX20061 VIDEO.SW
IC3801 CX20061 VIDEO.SW
Q3209 2SC3311A BUFFER
Q3203 2SA1309A SYNC.SEP
Q3812 XDC144ES SUB-MUTE
IC3202 MB88735-137 TUNING.CONT
IC3805 CXA1315P D/A.CONV.
Q3814 2SA1309A H.SYNC.SEP
Q3815 2SA1309A V.SYNC.SEP
Q3206 2SA1309A RESET
Q3205 RD5.6ESL RESET.REF
X3201 4MHz
Q3823 2SA1309A Y.HOOK.UP1
Q3820 2SC3311A Y.HOOK.UP2
Q3822 2SA1309A Y.BUFFER
Q3816 2SC3311A HP.INV
Q3806 2SC3311A G.MATRIX
Q3807 2SC3311A G.BUFFER
Q3809 2SC3311A R.BUFFER
Q3808 2SC3311A R.MATRIX
Q3811 2SC3311A B.BUFFER
Q3810 2SC3311A B.MATRIX
9.3V
5.6V
5V
SUB CONT
SUB COLOR
SUB HUE
DET OUT
G DRV
B DRV
TO V BOARD V-3
P-3 8P WHT
R-Y
B-Y
E
Y
E
C.SYNC
HDW
VDW
FOR CHECK
C.SYNC
H.D(W)
5V
H.D(R)
RGP CLAMP
P-6 5P RED
TO A BOARD A-32
E
YS
REXT
GEXT
BEXT
P-32 5P YEL
P-2 9P WHT
TO V BOARD V-2
P-31 6P RED
TO A BOARD A-31
1
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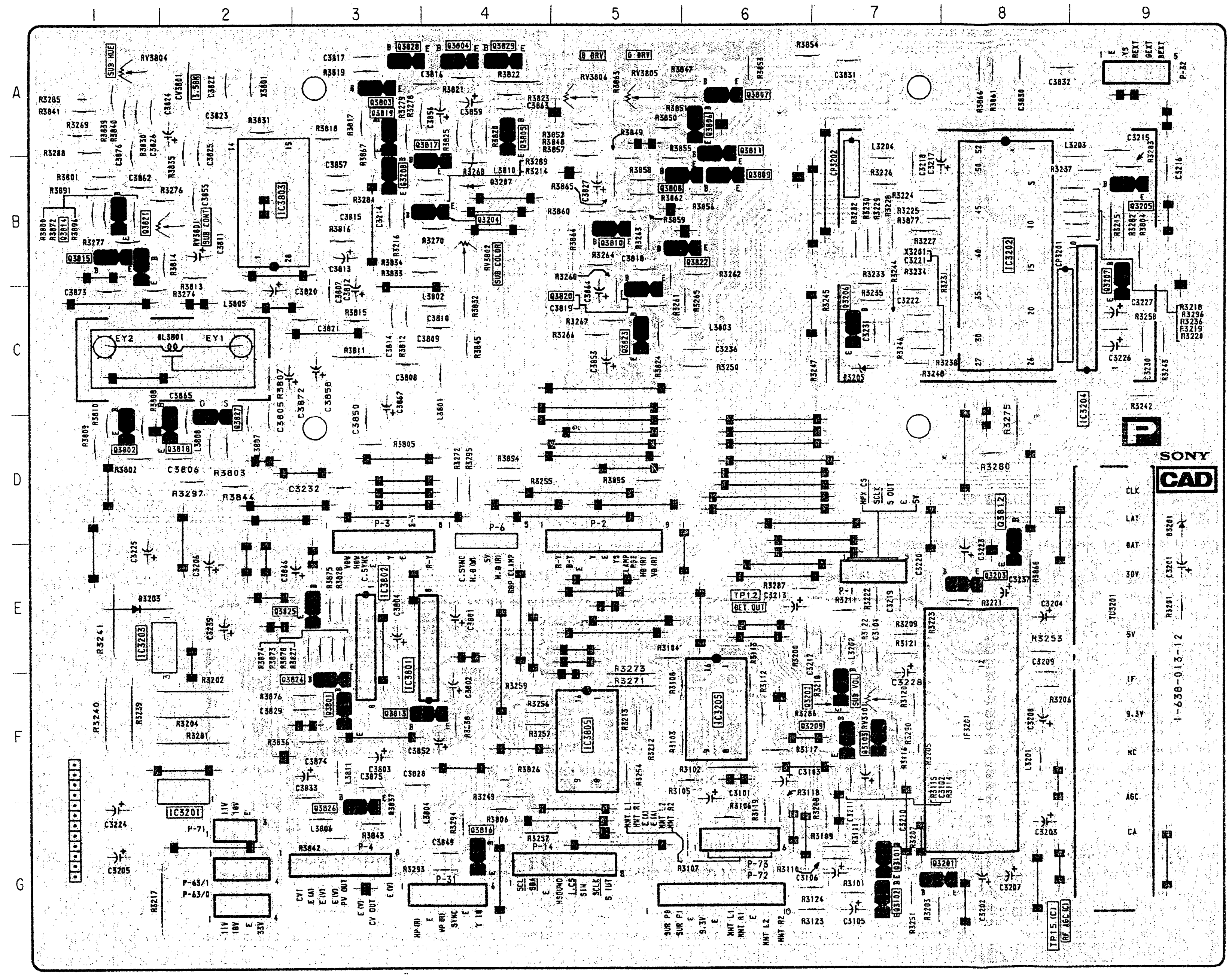
6
7

[PIP Y/C DECODER] **P**

– P Board –


1
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7
8
9
A
B
C
D
E
F
G
IC3201
IC3202
IC3203
IC3204
IC3205
IC3801
IC3802
IC3803
IC3805
P-2
P-3
P-4
P-6
P-14
P-31
P-71
P-72
P-73
P
SONY
CAD
1-638-013-12

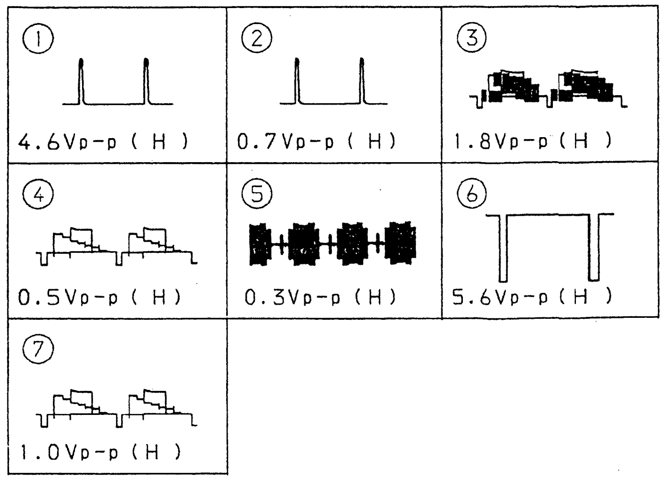
IC	
IC3201	G-2
IC3202	B-8
IC3203	E-2
IC3204	C-9
IC3205	F-6
IC3801	E-4
IC3802	E-3
IC3803	B-2
IC3805	F-5

TRANSISTOR	
Q3101	G-7
Q3102	G-7
Q3103	F-7
Q3201	G-8
Q3202	F-7
Q3203	E-8
Q3204	B-4
Q3205	B-9
Q3206	C-7
Q3207	B-9
Q3208	B-3
Q3209	F-7
Q3801	F-3
Q3802	D-1
Q3803	A-3
Q3804	A-4
Q3805	A-4
Q3806	A-6
Q3807	A-6
Q3808	B-5
Q3809	B-6
Q3810	B-5
Q3811	A-6
Q3812	E-8
Q3813	F-4
Q3814	B-1
Q3815	B-1
Q3816	G-4
Q3817	B-4
Q3818	D-2
Q3819	A-3
Q3820	C-5
Q3821	B-1
Q3822	B-6
Q3823	C-5
Q3824	F-3
Q3825	E-3
Q3826	G-3
Q3827	D-2
Q3828	A-3
Q3829	A-4

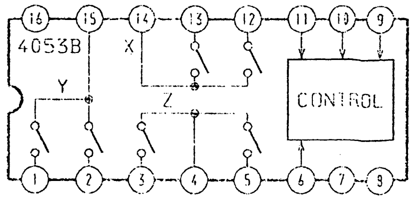
DIODE	
D3201	D-9
D3203	E-1
D3205	C-7
D3207	B-4

VARIABLE RESISTOR	
RV3101	F-7
RV3801	B-2
RV3802	B-4
RV3804	A-1
RV3805	A-5
RV3806	A-5

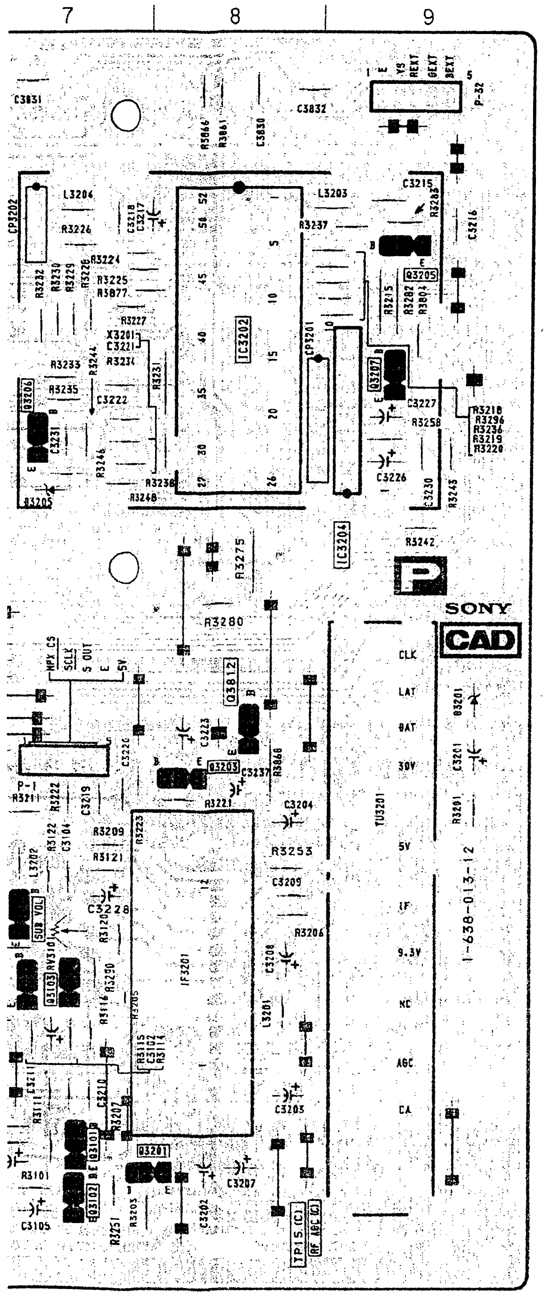
P BOARD


①
4.6Vp-p (H)
②
0.7Vp-p (H)
③
1.8Vp-p (H)
④
0.5Vp-p (H)
⑤
0.3Vp-p (H)
⑥
5.6Vp-p (H)
⑦
1.0Vp-p (H)

P BOARD IC3205 μPD4053BC

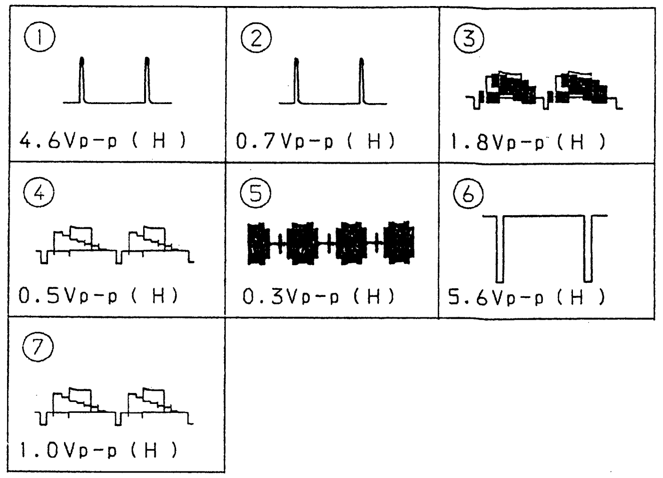

⑯
⑮
⑭
⑬
⑫
⑪
⑩
⑨
4053B
X
Y
Z
CONTROL
①
②
③
④
⑤
⑥
⑦
⑧

P
C DECODER **P**

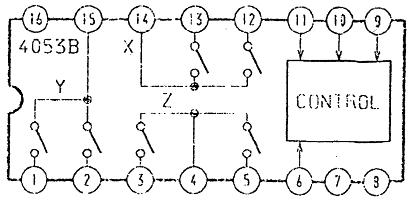

7
8
9
IC3202
IC3204
IC3201
Q3812
Q3203
Q3205
Q3207
P
SONY
CAD
CLK
LAT
DAT
30V
5V
IF
9.3V
NC
AGC
CA
TU3201
1-638-013-12
TP15 (C)
RF AGC (C)

IC	
IC3201	G-2
IC3202	B-8
IC3203	E-2
IC3204	C-9
IC3205	F-6
IC3801	E-4
IC3802	E-3
IC3803	B-2
IC3805	F-5
TRANSISTOR	
Q3101	G-7
Q3102	G-7
Q3103	F-7
Q3201	G-8
Q3202	F-7
Q3203	E-8
Q3204	B-4
Q3205	B-9
Q3206	C-7
Q3207	B-9
Q3208	B-3
Q3209	F-7
Q3801	F-3
Q3802	D-1
Q3803	A-3
Q3804	A-4
Q3805	A-4
Q3806	A-6
Q3807	A-6
Q3808	B-5
Q3809	B-6
Q3810	B-5
Q3811	A-6
Q3812	E-8
Q3813	F-4
Q3814	B-1
Q3815	B-1
Q3816	G-4
Q3817	B-4
Q3818	D-2
Q3819	A-3
Q3820	C-5
Q3821	B-1
Q3822	B-6
Q3823	C-5
Q3824	F-3
Q3825	E-3
Q3826	G-3
Q3827	D-2
Q3828	A-3
Q3829	A-4
DIODE	
D3201	D-9
D3203	E-1
D3205	C-7
D3207	B-4
VARIABLE RESISTOR	
RV3101	F-7
RV3801	B-2
RV3802	B-4
RV3804	A-1
RV3805	A-5
RV3806	A-5

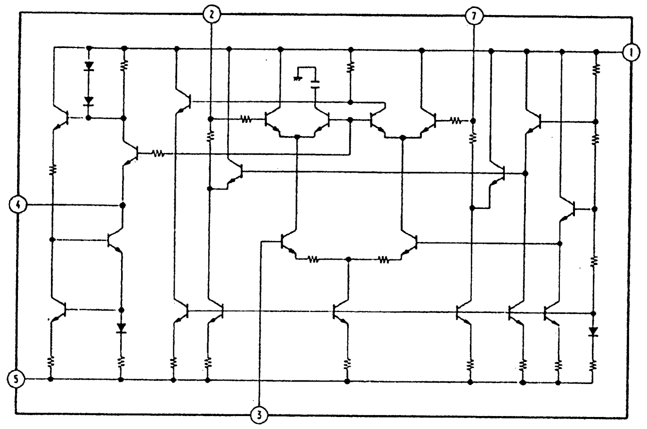
P BOARD


①
4.6Vp-p (H)
②
0.7Vp-p (H)
③
1.8Vp-p (H)
④
0.5Vp-p (H)
⑤
0.3Vp-p (H)
⑥
5.6Vp-p (H)
⑦
1.0Vp-p (H)

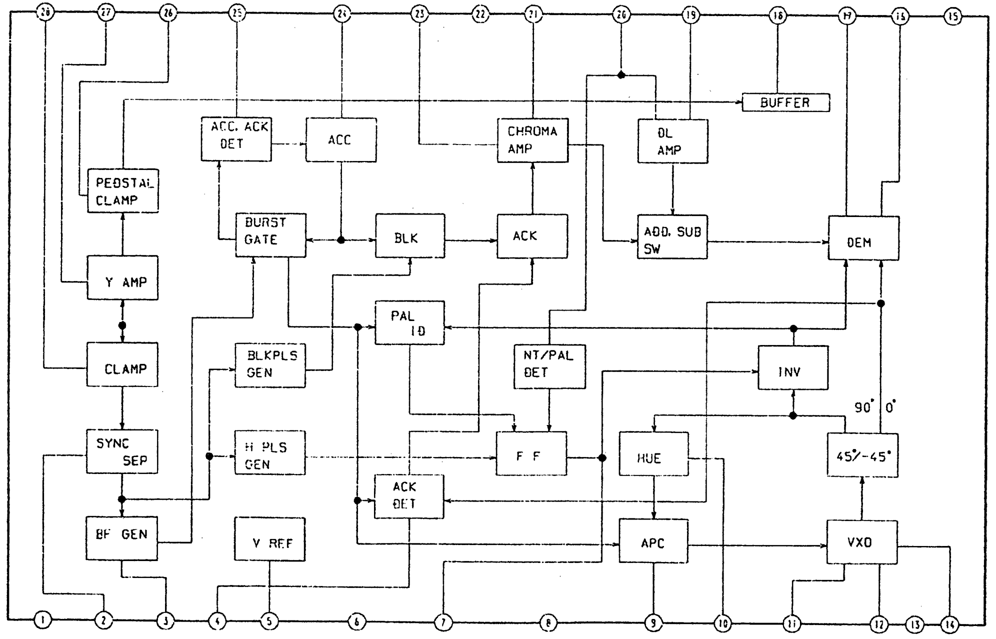
P BOARD IC3205 μPD4053BC


⑯
⑮
⑭
⑬
⑫
⑪
⑩
⑨
4053B
X
Y
Z
CONTROL
①
②
③
④
⑤
⑥
⑦
⑧

P BOARD IC3801,3802 CX20061



P BOARD IC3803 CXA1228S


BUFFER
ACC, ACK DET
ACC
CHROMA AMP
DL AMP
PEDSTAL CLAMP
BURST GATE
BLK
ACK
ADD, SUB SW
DEM
Y AMP
PAL ID
CLAMP
BLKPLS GEN
NT/PAL DET
INV
90° 0°
SYNC SEP
H PLS GEN
F F
HUE
45°/-45°
ACK DET
BF GEN
V REF
APC
VXO
①
②
③
④
⑤
⑥
⑦
⑧
⑨
⑩
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⑬
⑭
⑮
⑯
⑰
⑱
⑲
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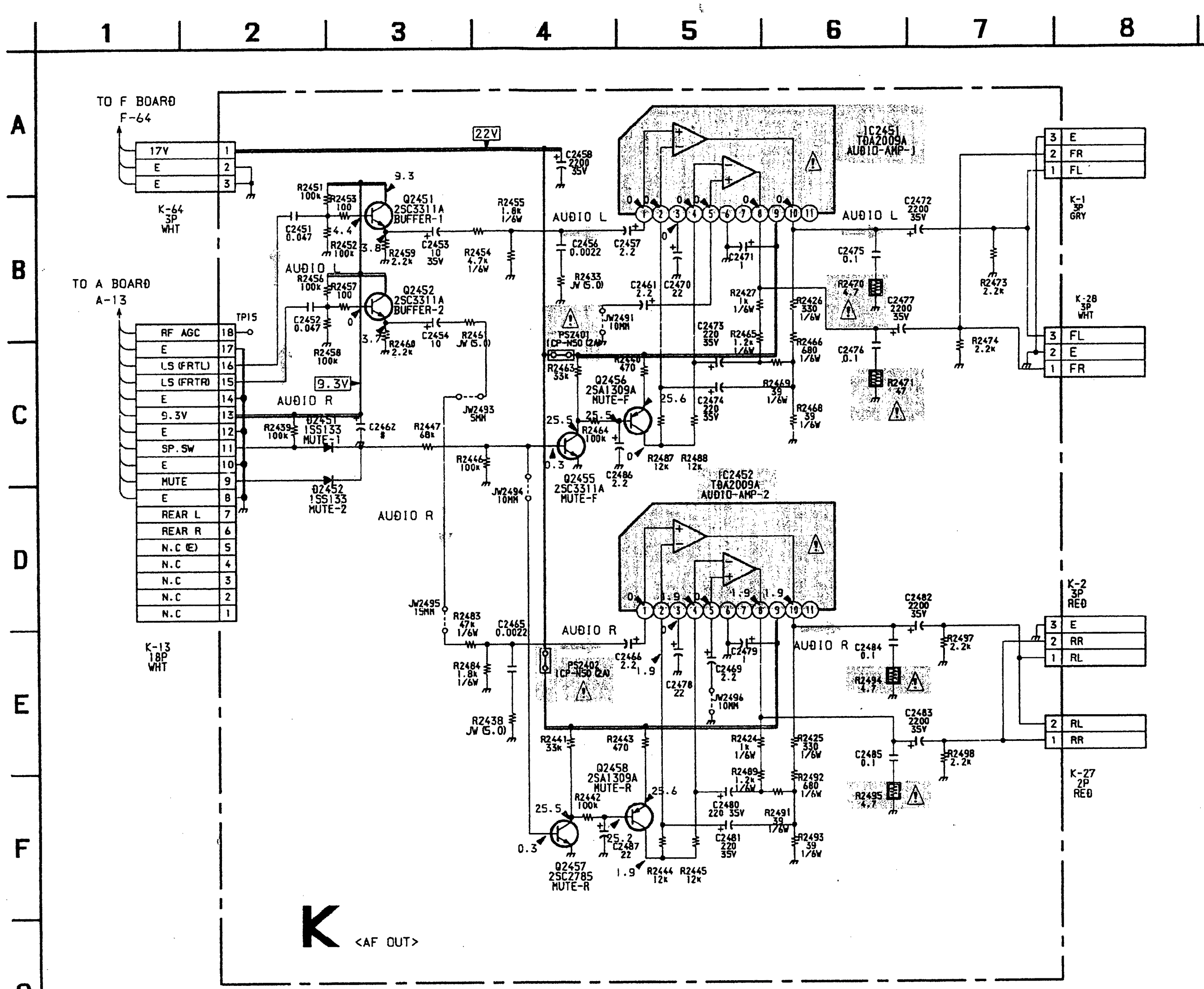
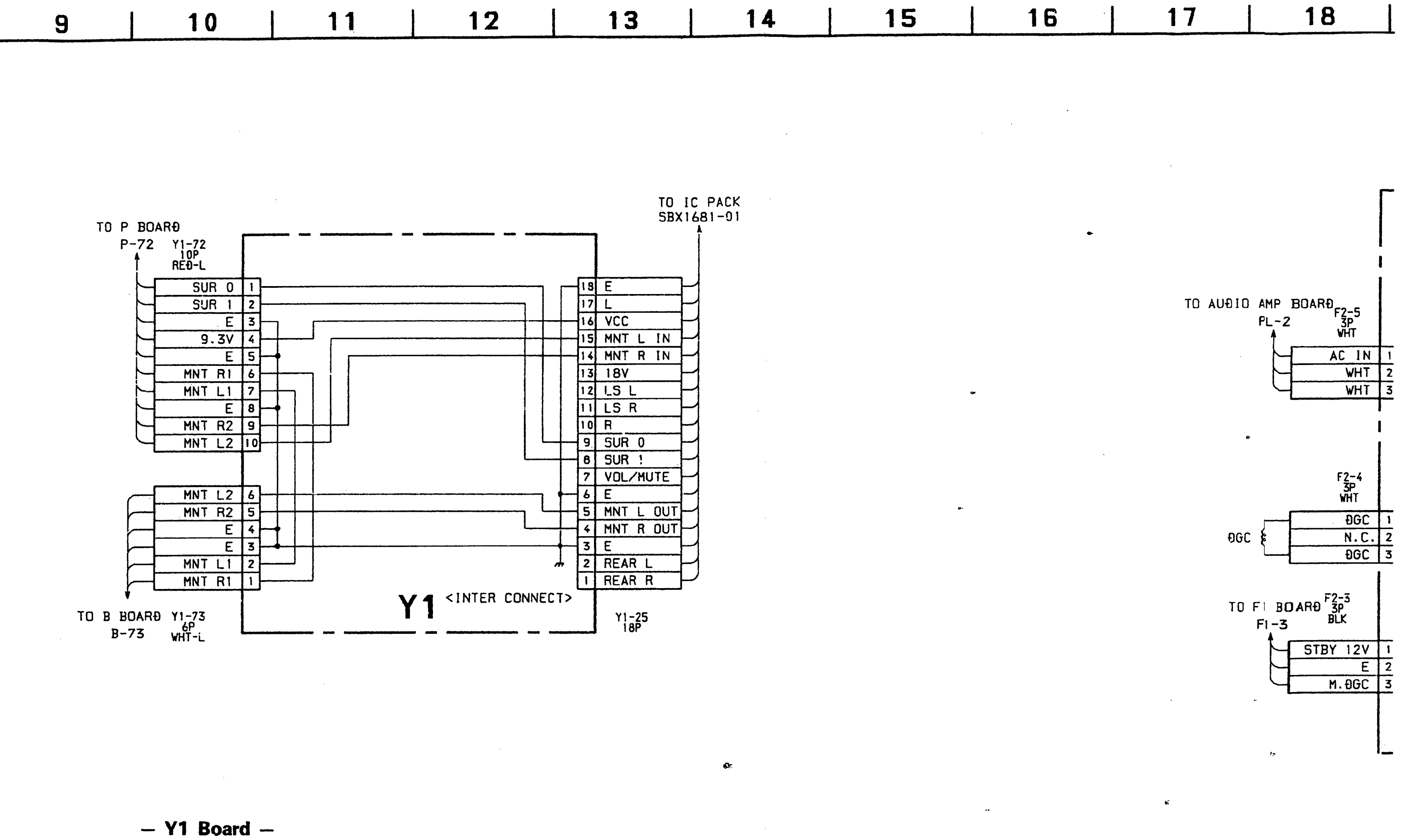
㉘

[AF OUT] **K**

Y1 [INTER CONNECT]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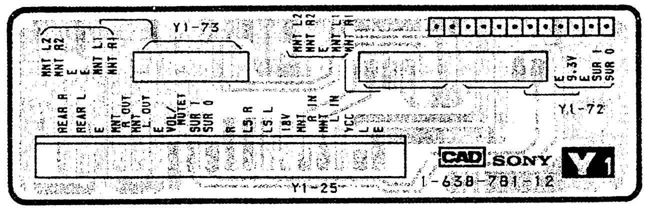
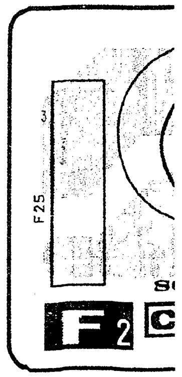
18
A
B
C
D
E
F
G
TO F BOARD F-64
17V
E
E
K-64 3P WHT
TO A BOARD A-13
RF AGC
E
LS (FRTL)
LS (FRTR)
E
9.3V
E
SP.SW
E
MUTE
E
REAR L
REAR R
N.C (E)
N.C
N.C
N.C
N.C
K-13 18P WHT
TP15
22V
9.3V
AUDIO L
AUDIO R
Q2451 2SC3311A BUFFER-1
Q2452 2SC3311A BUFFER-2
Q2451 1SS133 MUTE-1
Q2452 1SS133 MUTE-2
IC2451 TDA2009A AUDIO-AMP-1
IC2452 TDA2009A AUDIO-AMP-2
Q2456 2SA1309A MUTE-F
Q2455 2SC3311A MUTE-F
Q2458 2SA1309A MUTE-R
Q2457 2SC2785 MUTE-R
PS2401 ICP-N50
PS2402 ICP-N50
AUDIO L
AUDIO R
E
FR
FL
K-1 3P GRY
K-28 3P WHT
FL
E
FR
K-2 3P RED
E
RR
RL
RL
RR
K-27 2P RED
K <AF OUT>
TO P BOARD P-72
Y1-72 10P RED-L
SUR 0
SUR 1
E
9.3V
E
MNT R1
MNT L1
E
MNT R2
MNT L2
TO IC PACK SBX1681-01
E
L
VCC
MNT L IN
MNT R IN
18V
LS L
LS R
R
SUR 0
SUR 1
VOL/MUTE
E
MNT L OUT
MNT R OUT
E
REAR L
REAR R
Y1-25 18P
MNT L2
MNT R2
E
E
MNT L1
MNT R1
TO B BOARD B-73
Y1-73 6P WHT-L
Y1 <INTER CONNECT>
TO AUDIO AMP BOARD PL-2
F2-5 3P WHT
AC IN
WHT
WHT
F2-4 3P WHT
DGC
DGC
N.C.
DGC
TO F1 BOARD F1-3
F2-3 3P BLK
STBY 12V
E
M.DGC

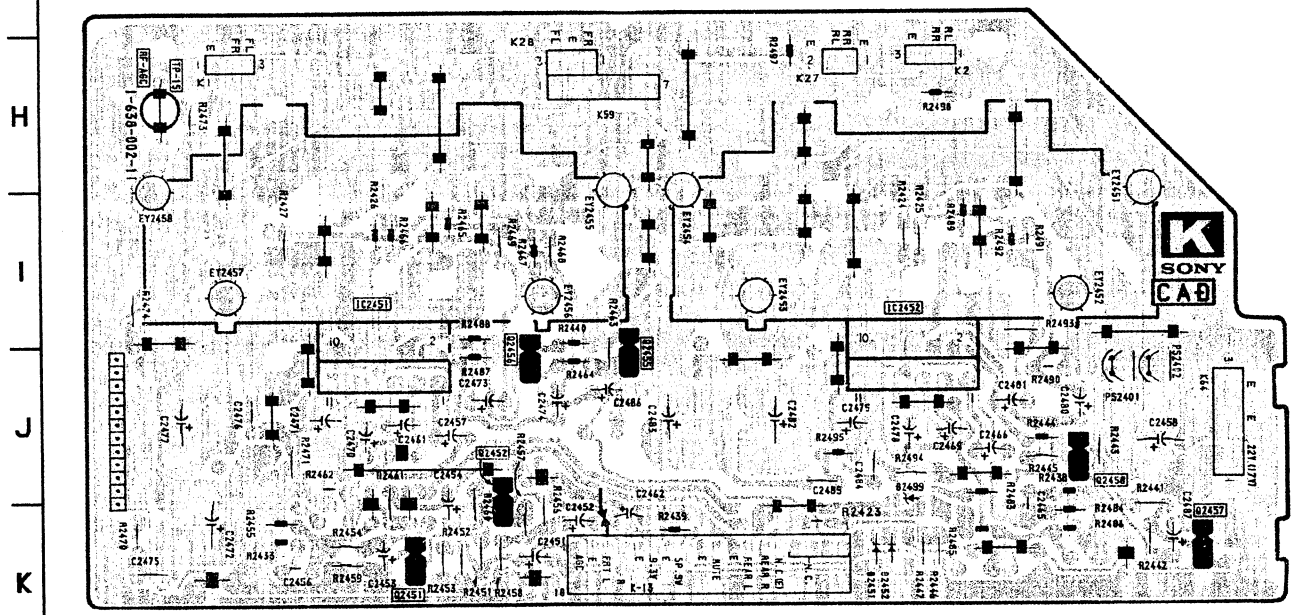
- Y1 Board -


Y1-73
Y1-72
Y1-25
CAD
SONY
Y1
1-638-781-12

- F2 Board -



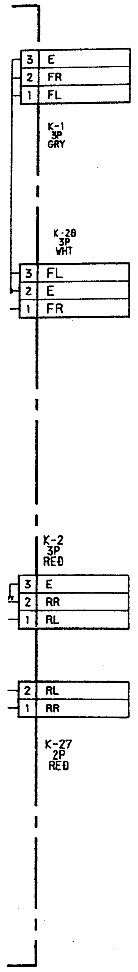
- K Board -

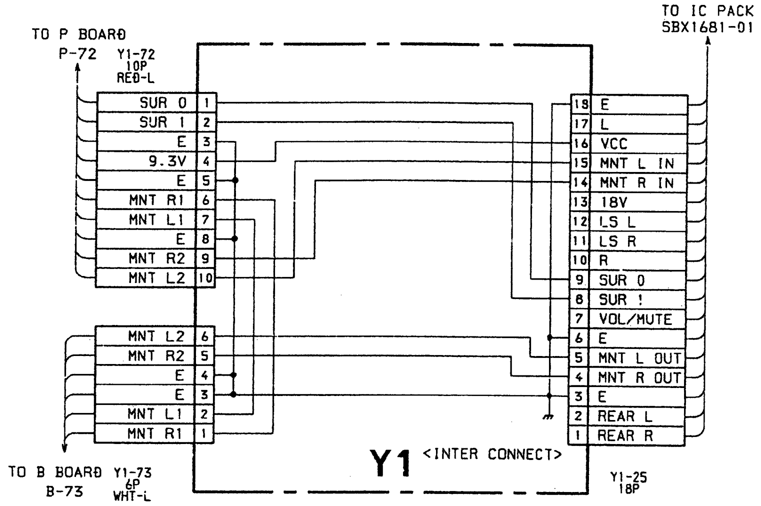

H
I
J
K
K1
K28
K27
K2
K59
IC2451
IC2452
PS2401
K
SONY
CAD

K

Y1 [INTER CONNECT]

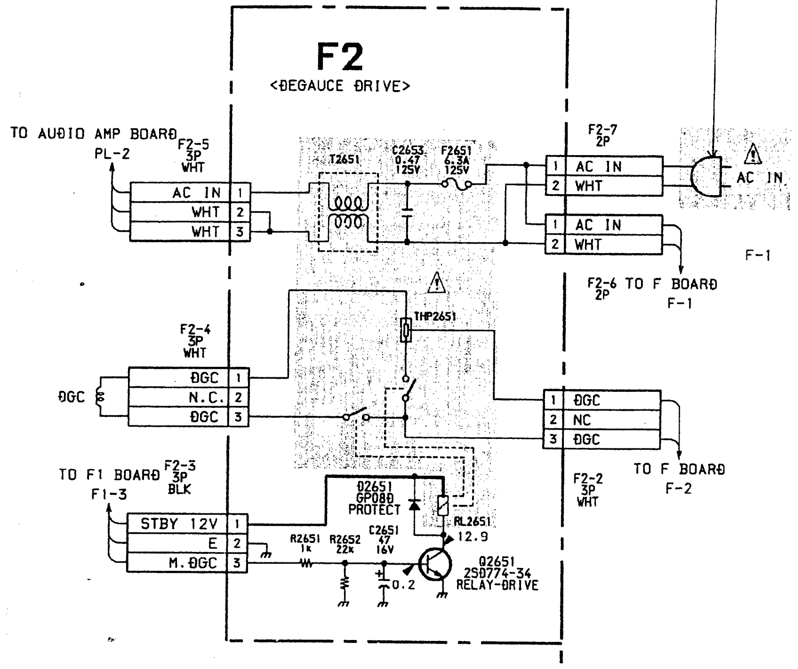
F2 [DEGAUCE DRIVE]


E
FR
FL
K-1 3P GRY
K-28 3P WHT
FL
E
FR
K-2 3P RED
E
RR
RL
RL
RR
K-27 2P RED

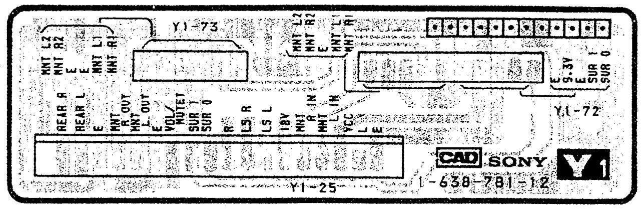

TO P BOARD P-72
Y1-72 10P RED-L
TO IC PACK SBX1681-01
SUR 0
SUR 1
E
9.3V
MNT R1
MNT L1
MNT R2
MNT L2
E
L
VCC
MNT L IN
MNT R IN
18V
LS L
LS R
R
VOL/MUTE
MNT L OUT
MNT R OUT
REAR L
REAR R
TO B BOARD Y1-73 B-73 6P WHT-L
Y1 <INTER CONNECT>
Y1-25 18P

CAUTION

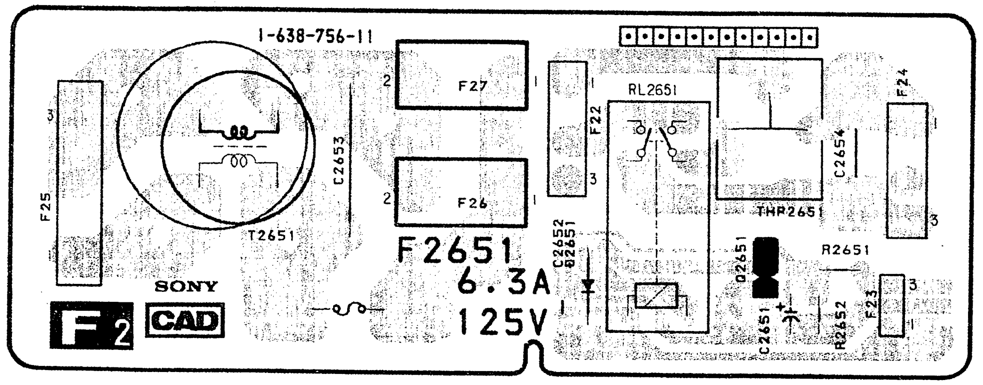
This set is equipped with a polarized ac power cord plug (one blade of the plug is wider than the other). When replacing the ac power cord, be sure to connect it with specified part number as shown in this diagram.

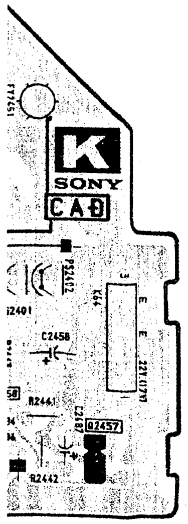

F2
<DEGAUCE DRIVE>
TO AUDIO AMP BOARD PL-2
F2-5 3P WHT
AC IN
WHT
T2651
C2653 0.47 125V
F2651 6.3A 125V
F2-7 2P
AC IN
F2-6 TO F BOARD 2P F-1
F-1
THP2651
F2-4 3P WHT
DGC
N.C.
NC
TO F BOARD F-2
F2-2 3P WHT
TO F1 BOARD F1-3
F2-3 3P BLK
STBY 12V
M.DGC
D2651 GP08D PROTECT
RL2651
12.9
R2651 1k
R2652 22k
C2651 47 16V
0.2
Q2651 2SD774-34 RELAY-DRIVE

– Y1 Board –

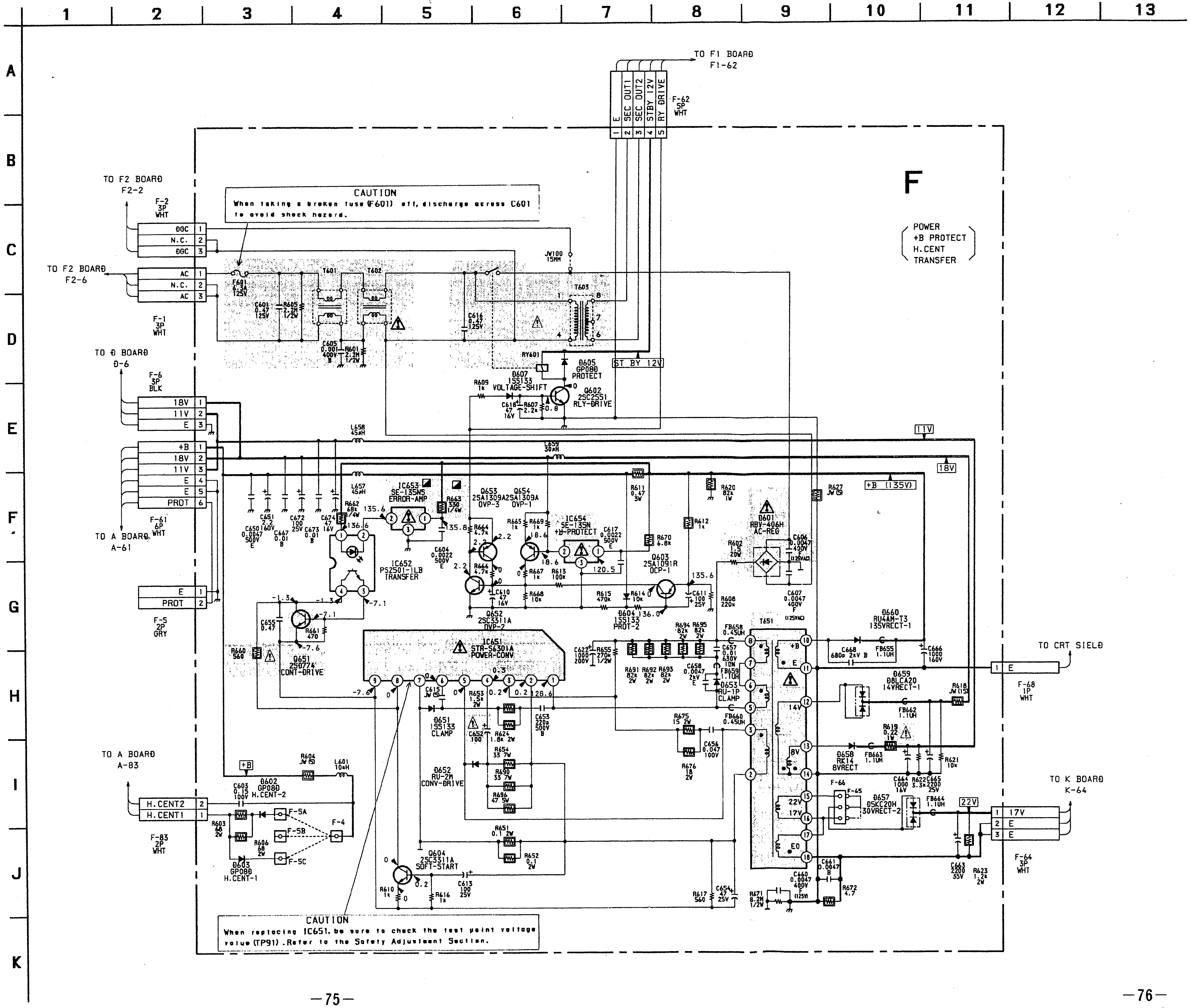

Y1-73
Y1-72
Y1-25
SONY
CAD
Y1
1-638-781-12

– F2 Board –


1-638-756-11
F27
F26
F22
F24
F25
F23
RL2651
THP2651
T2651
C2653
C2654
C2652
D2651
Q2651
R2651
R2652
C2651
F2651 6.3A 125V
SONY
CAD
F2


K
SONY
CAD
C2458
R2441
Q2457
R2442

F POW
+B
H. C
TRAN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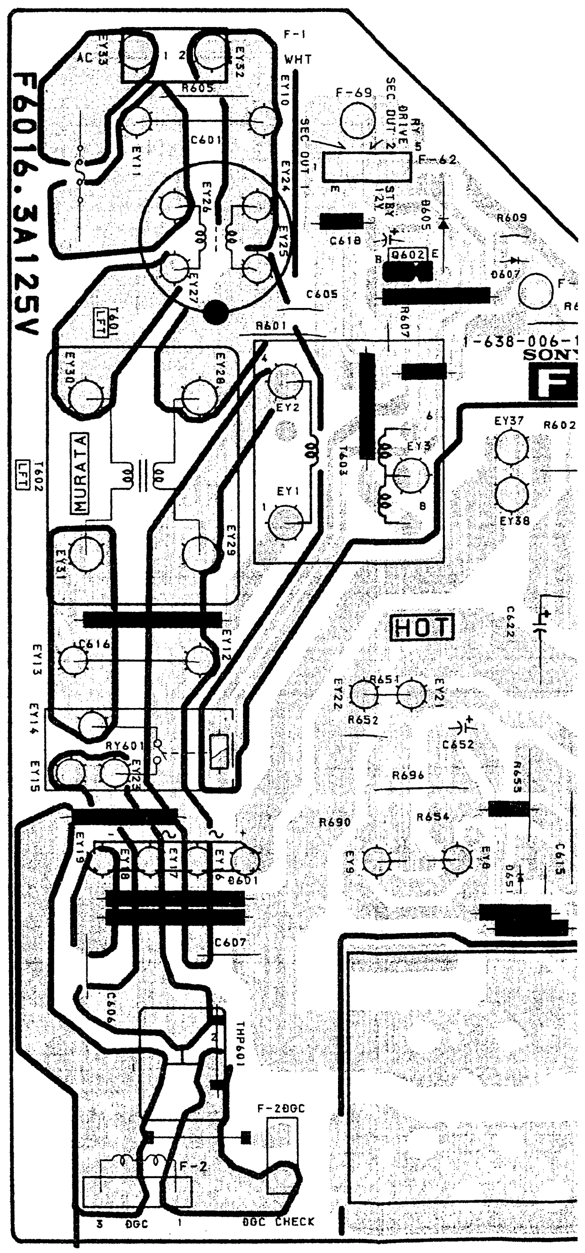
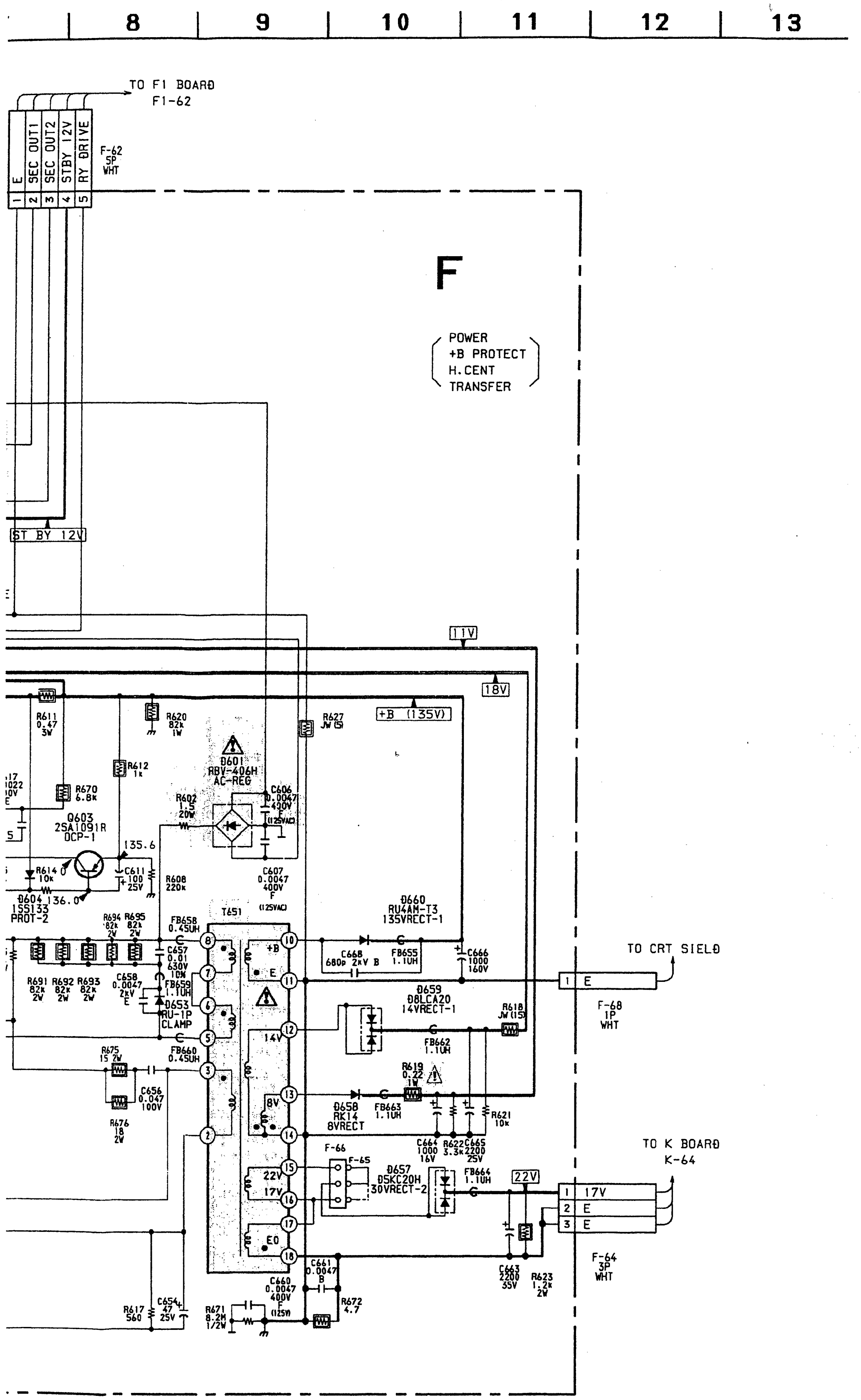
12
13
A
B
C
D
E
F
G
H
I
J
K
TO F1 BOARD
F1-62
1 E
2 SEC OUT1
3 SEC OUT2
4 STBY 12V
5 RY DRIVE
F-62
5P
WHT
F
POWER
+B PROTECT
H.CENT
TRANSFER
TO F2 BOARD
F2-2
F-2
3P
WHT
DGC
N.C.
DGC
TO F2 BOARD
F2-6
AC
N.C.
AC
F-1
3P
WHT
TO D BOARD
D-6
F-6
3P
BLK
18V
11V
E
+B
18V
11V
E
E
PROT
F-61
6P
WHT
TO A BOARD
A-61
E
PROT
F-5
2P
GRY
TO A BOARD
A-83
H.CENT2
H.CENT1
F-83
2P
WHT
F601
T601
T602
T603
C601
0.47
125V
R605
2.2M
1/2W
C605
0.001
400V
R601
2.2M
1/2W
C616
0.47
125V
JW100
15MM
RY601
D605
GP08D
PROTECT
D607
1SS133
VOLTAGE-SHIFT
Q602
2SC2551
RLY-DRIVE
R609
1k
C618
47
16V
R607
2.2k
ST BY 12V
L658
45µH
L659
30µH
L657
45µH
11V
18V
+B (135V)
IC653
SE-135NS
ERROR-AMP
IC652
PS2501-1LB
TRANSFER
Q653
2SA1309A
OVP-3
Q654
2SA1309A
OVP-1
IC654
SE-135N
+B-PROTECT
C617
0.0022
500V
R611
0.47
3W
R620
82k
1W
R627
JW
R670
6.8k
Q603
2SA1091R
OCP-1
R612
1k
D601
RBV-406H
AC-REG
C606
0.0047
400V
R602
1.5
20W
C607
0.0047
400V
R608
220k
C611
100
25V
R615
470k
R614
10k
D604
1SS133
PROT-2
C610
47
16V
R668
10k
R667
1k
R613
100k
Q652
2SC3311A
OVP-2
C604
0.0022
500V
C650
0.0047
500V
C651
2.2
160V
C672
100
25V
C673
0.01
C674
47
16V
C667
0.01
R662
68k
1/4W
R663
330
1/4W
R664
4.7k
R665
1k
R669
1k
R666
4.7k
135.6
136.6
135.8
120.5
136.0
18.6
2.2
-1.3
-7.1
-7.6
C655
0.47
Q651
2SD774
CONT-DRIVE
R661
470
R660
560
IC651
STR-S6301A
POWER-CONV
C615
JW
R653
1.5k
2W
D651
1SS133
CLAMP
C652
100
R624
1.8k
2W
C653
220p
500V
R654
33
7W
R690
33
7W
R696
47
5W
Q652
RU-2M
CONV-DRIVE
R651
0.1
2W
R652
0.1
2W
Q604
2SC3311A
SOFT-START
R610
1k
R616
1k
C613
100
25V
C622
1000
200V
R655
270k
1/2W
R691
82k
2W
R692
82k
2W
R693
82k
2W
R694
82k
2W
R695
82k
2W
C657
0.01
630V
C658
0.0047
2kV
FB658
0.45µH
FB659
1.1µH
D653
RU-1P
CLAMP
FB660
0.45µH
R675
15
2W
C656
0.047
100V
R674
18
2W
R617
560
C654
47
25V
R671
8.2M
1/2W
C660
0.0047
400V
C661
0.0047
R672
4.7
T651
14V
8V
22V
17V
E0
D660
RU4AM-T3
135VRECT-1
C668
680p
2kV
FB655
1.1µH
C666
1000
160V
D659
D8LCA20
14VRECT-1
R618
JW
FB662
1.1µH
R619
0.22
1W
D658
RK14
8VRECT
FB663
1.1µH
R621
10k
C664
1000
16V
R622
3.3k
C665
2200
25V
D657
D5KC20H
30VRECT-2
FB664
1.1µH
C663
2200
35V
R423
1.2k
2W
22V
TO CRT SIELD
E
F-68
1P
WHT
TO K BOARD
K-64
17V
E
E
F-64
3P
WHT
D602
GP08D
H.CENT-2
C603
0.15
100V
R604
JW
L601
10µH
R603
68
2W
R606
68
2W
D603
GP08D
H.CENT-1
F-5A
F-5B
F-5C
F-4
F-66
F-65

CAUTION
When taking a broken fuse (F601) off, discharge across C601 to avoid shock hazard.

CAUTION
When replacing IC651, be sure to check the test point voltage value (TP91). Refer to the Safety Adjustment Section.

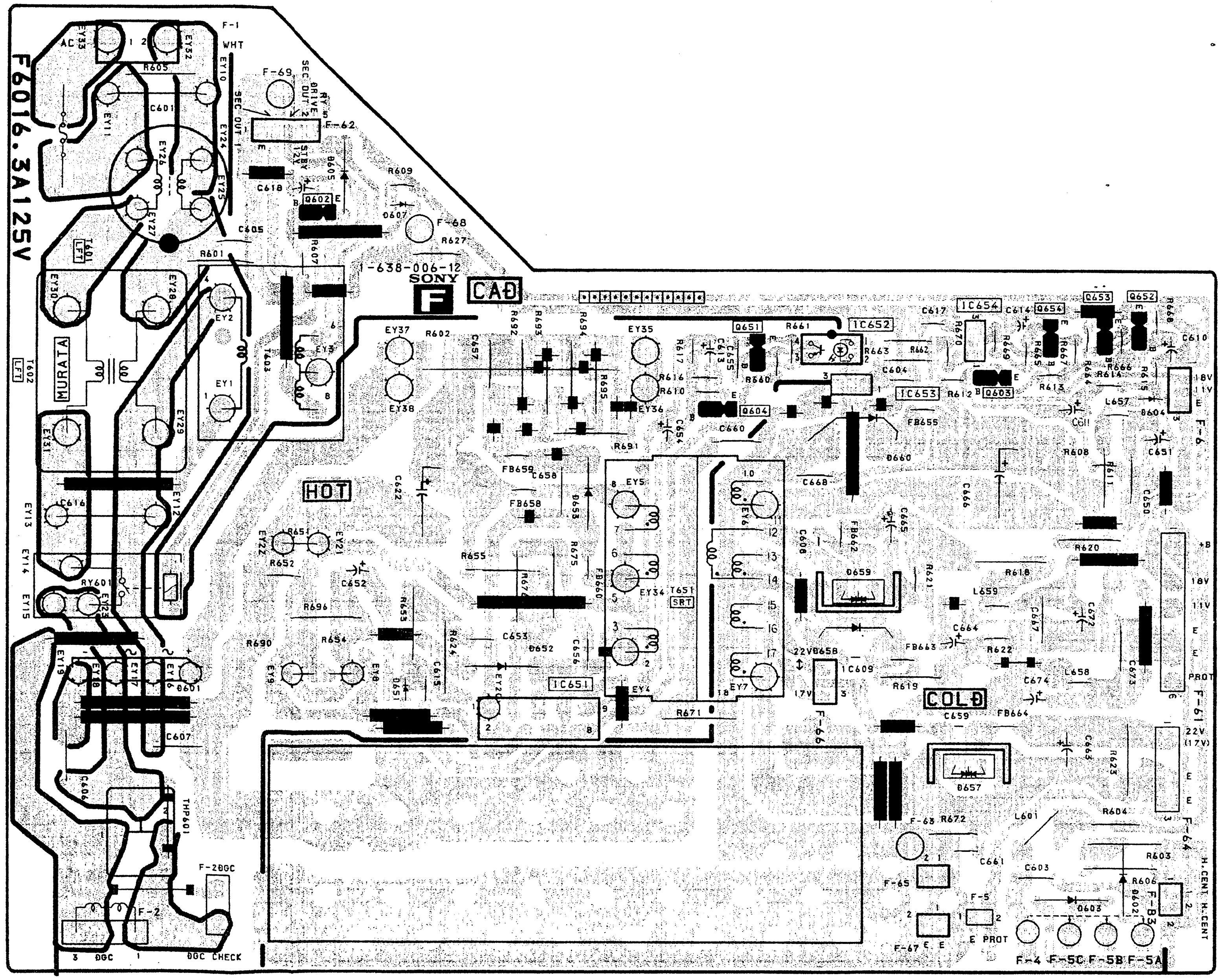
– F Board –

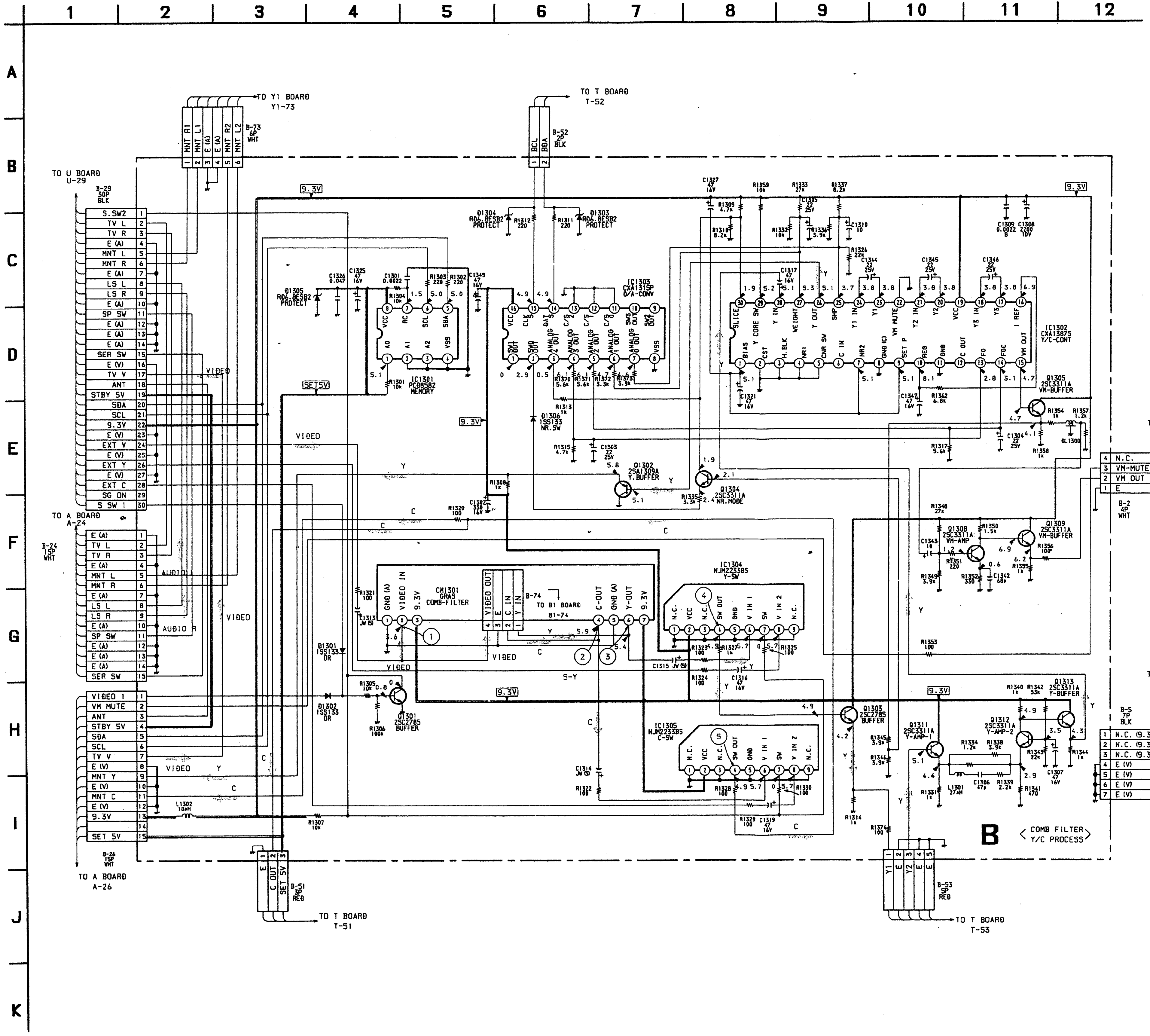

F601 6.3A125V
F-1
WHT
AC
1
2
EY33
EY32
R605
C601
EY11
SEC OUT 1
SEC OUT 2
RY DRIVE
STBY 12V
F-69
F-62
EY24
EY26
EY25
EY27
C618
Q602
C605
R609
R607
R601
T601
LFT
T602
LFT
EY30
EY28
1-638-006-1
SONY
F
MURATA
EY2
EY1
EY3
T603
EY37
EY38
R602
EY31
EY29
C616
EY12
EY13
EY14
EY15
HOT
EY22
R651
EY21
R652
C622
RY601
C652
R696
R655
R690
R654
EY16
EY17
EY18
EY19
EY20
EY6
D601
EY8
EY9
C615
C607
C606
THP601
F-2
F-2DC
3 DGC
1
DGC CHECK


8
9
10
11
12
13
TO F1 BOARD
F1-62
E
SEC OUT1
SEC OUT2
STBY 12V
RY DRIVE
F-62
5P
WHT
F
POWER
+B PROTECT
H.CENT
TRANSFER
ST BY 12V
11V
18V
+B (135V)
D601
RBV-406H
AC-REG
Q603
2SA1091R
OCP-1
D604
1SS133
PROT-2
T651
D660
RU4AM-T3
135VRECT-1
D659
D8LCA20
14VRECT-1
D453
RU-1P
CLAMP
D658
RK14
8VRECT
D657
D5KC20H
30VRECT-2
TO CRT SIELD
F-68
1P
WHT
TO K BOARD
K-64
22V
17V
F-64
3P
WHT
F-65
F-66

F POWER +B PROTECT H. CENT TRANSFER

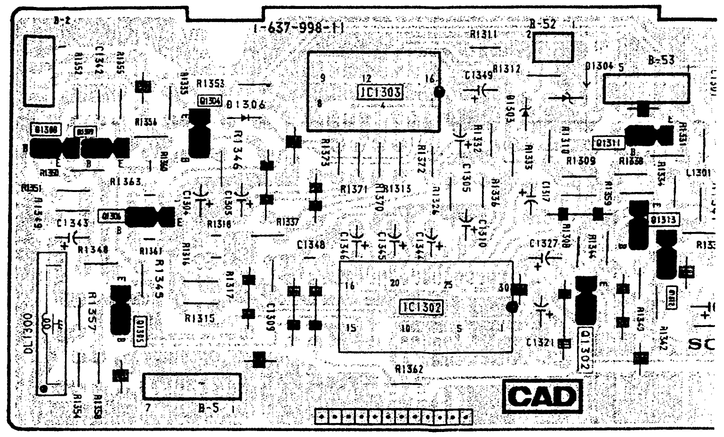
– F Board –


F6016.3A125V
1-638-006-12
SONY
F
CAD
HOT
COLD
MURATA
F-1
WHT
F-62
F-68
F-69
F-2
F-20DC
DOC CHECK
IC651
IC652
IC653
IC654
T651
SRT
F-4
F-5C
F-5B
F-5A
F-64
F-65
F-66
F-67
H.CENT
PROT

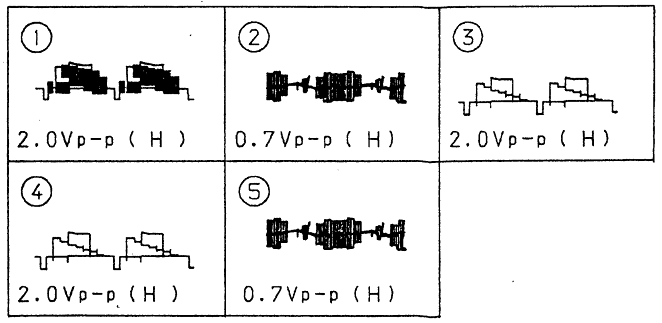

1
2
3
4
5
6
7
8
9
10
11
12
A
B
C
D
E
F
G
H
I
J
K
TO Y1 BOARD Y1-73
B-73 6P WHT
MNT R1
MNT L1
E (A)
E (A)
MNT R2
MNT L2
TO T BOARD T-52
B-52 2P BLK
BCL
BOA
TO U BOARD U-29
B-29 30P BLK
S.SW2
TV L
TV R
E (A)
MNT L
MNT R
E (A)
LS L
LS R
E (A)
SP SW
E (A)
E (A)
E (A)
SER SW
E (V)
TV V
ANT
STBY 5V
SDA
SCL
9.3V
E (V)
EXT V
E (V)
EXT Y
E (V)
EXT C
SG ON
S SW 1
TO A BOARD A-24
B-24 15P WHT
AUDIO
VIDEO
TO A BOARD A-26
B-26 15P WHT
VIDEO 1
VM MUTE
STBY 5V
MNT Y
MNT C
SET 5V
L1302 10mH
R1307 10k
9.3V
SET 5V
D1305 RD6.8ESB2 PROTECT
D1304 RD6.8ESB2 PROTECT
D1303 RD6.8ESB2 PROTECT
IC1301 PCF8582 MEMORY
IC1303 CXA1315P D/A-CONV
IC1302 CXA1387S Y/C-CONT
Q1305 2SC3311A VM-BUFFER
Q1302 2SA1309A Y.BUFFER
Q1304 2SC3311A NR.MODE
D1306 1SS133 NR.SW
CN1301 GRAS COMB-FILTER
B-74 TO B1 BOARD B1-74
IC1304 NJM2233BS Y-SW
IC1305 NJM2233BS C-SW
Q1301 2SC2785 BUFFER
D1301 1SS133 OR
D1302 1SS133 OR
Q1303 2SC2785 BUFFER
Q1308 2SC3311A VM-AMP
Q1309 2SC3311A VM-BUFFER
Q1311 2SC3311A Y-AMP-1
Q1312 2SC3311A Y-AMP-2
Q1313 2SC3311A Y-BUFFER
L1301 27μH
TO W BOARD W-2
B-2 4P WHT
N.C.
VM-MUTE
VM OUT
E
TO U BOARD U-5
B-5 7P BLK
N.C. (9.3V)
N.C. (9.3V)
N.C. (9.3V)
E (V)
E (V)
E (V)
E (V)
B-51 3P RED
E
C OUT
SET 5V
TO T BOARD T-51
B-53 5P RED
Y1
Y2
E
E
TO T BOARD T-53
B
COMB FILTER
Y/C PROCESS
VIDEO
Y
C
S-Y
①
②
③
④
⑤

B [COMB FILTER Y/C PROCESS]

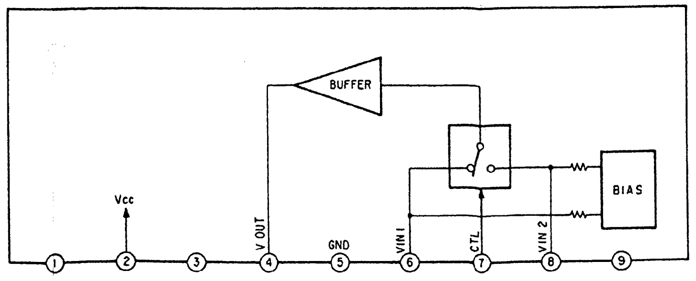
– B Board –

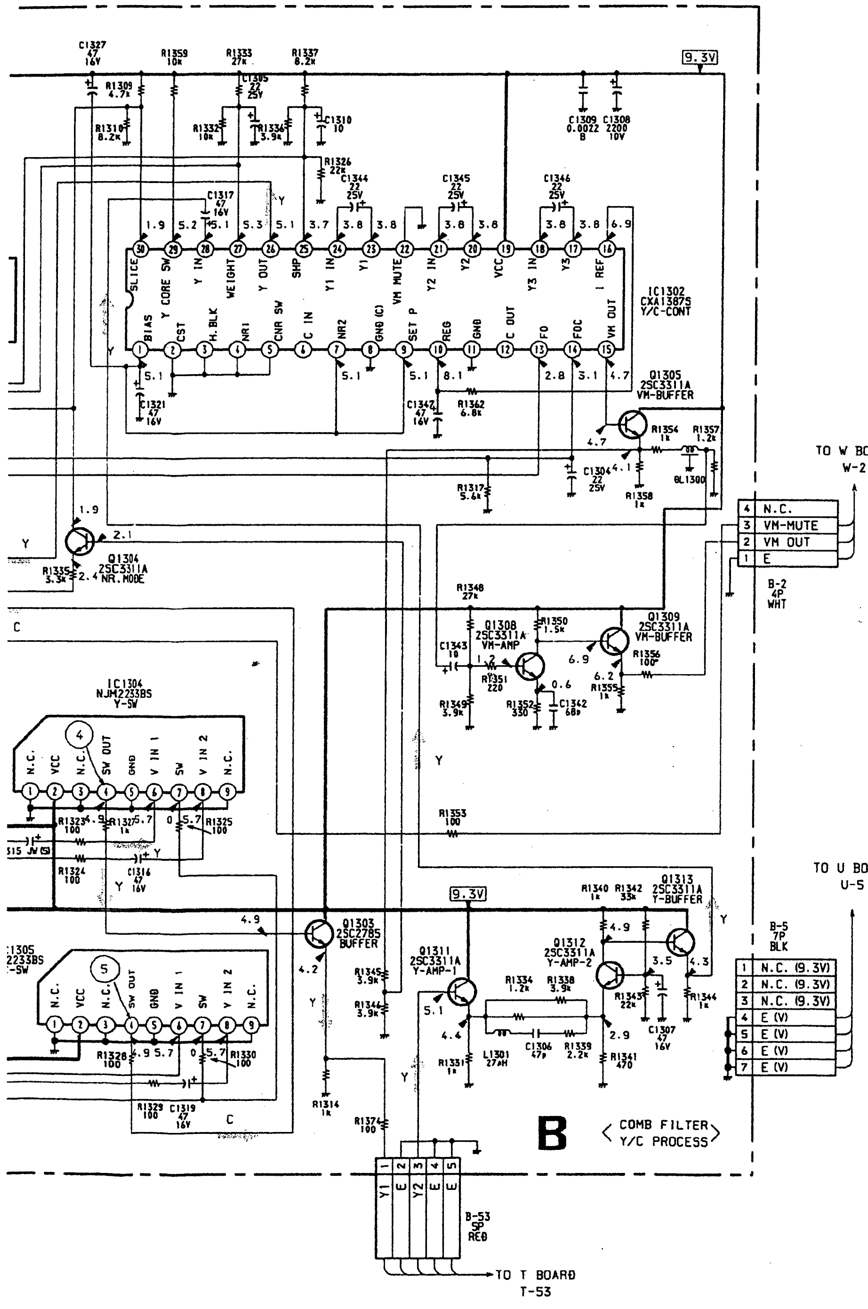

1-637-998-11
IC1303
IC1302
Q1306
CAD

B BOARD


①
2.0Vp-p (H)
②
0.7Vp-p (H)
③
2.0Vp-p (H)
④
2.0Vp-p (H)
⑤
0.7Vp-p (H)

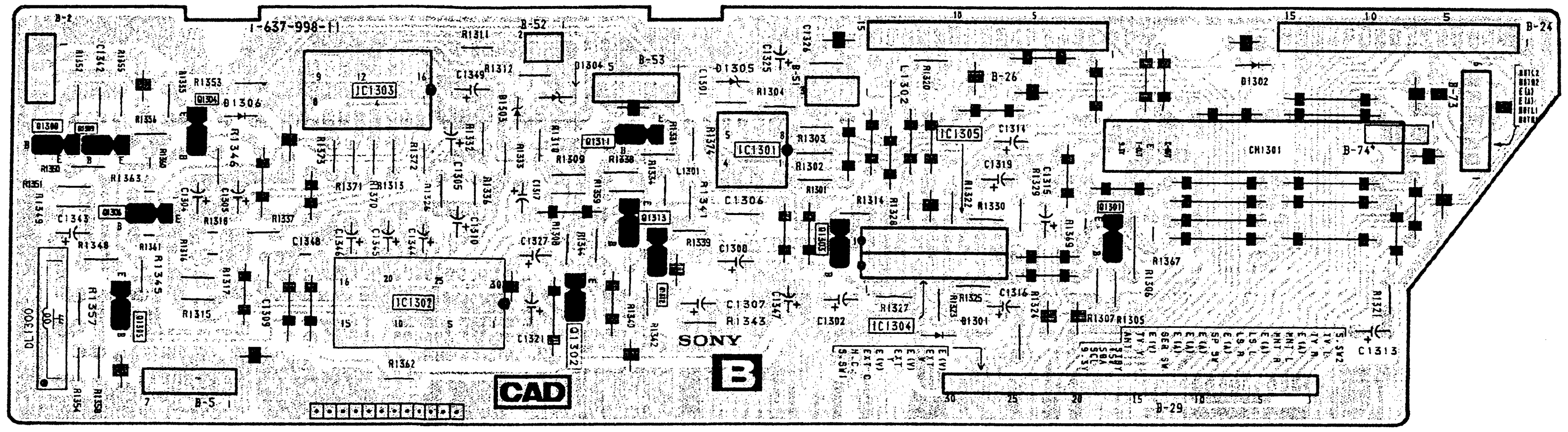
B BOARD IC1304,1305 NJM2233BS


BUFFER
BIAS
Vcc
V OUT
GND
VIN1
CTL
VIN 2
①
②
③
④
⑤
⑥
⑦
⑧
⑨

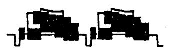
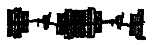
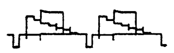
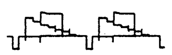
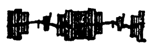

9.3V
IC1302
CXA1387S
Y/C-CONT
Q1305
2SC3311A
VM-BUFFER
Q1324
2SC3311A
NR.MODE
Q1308
2SC3311A
VM-AMP
Q1309
2SC3311A
VM-BUFFER
IC1304
NJM2233BS
Y-SW
IC1305
NJM2233BS
Q1303
2SC2785
BUFFER
Q1311
2SC3311A
Y-AMP-1
Q1312
2SC3311A
Y-AMP-2
Q1313
2SC3311A
Y-BUFFER
TO W BOARD
W-2
N.C.
VM-MUTE
VM OUT
E
B-2
4P
WHT
TO U BOARD
U-5
B-5
7P
BLK
N.C. (9.3V)
N.C. (9.3V)
N.C. (9.3V)
E (V)
E (V)
E (V)
E (V)
B
COMB FILTER
Y/C PROCESS
Y1
E
Y2
E
E
B-53
5P
RED
TO T BOARD
T-53

B [COMB FILTER Y/C PROCESS]

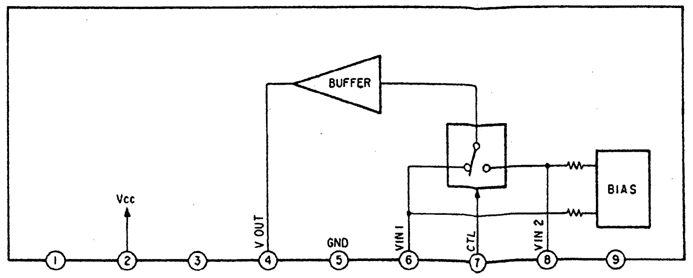
– B Board –


1-637-998-11
IC1303
IC1301
IC1305
IC1302
IC1304
CN1301
SONY
B
CAD
B-5
B-24
B-26
B-29
B-52
B-53
B-74

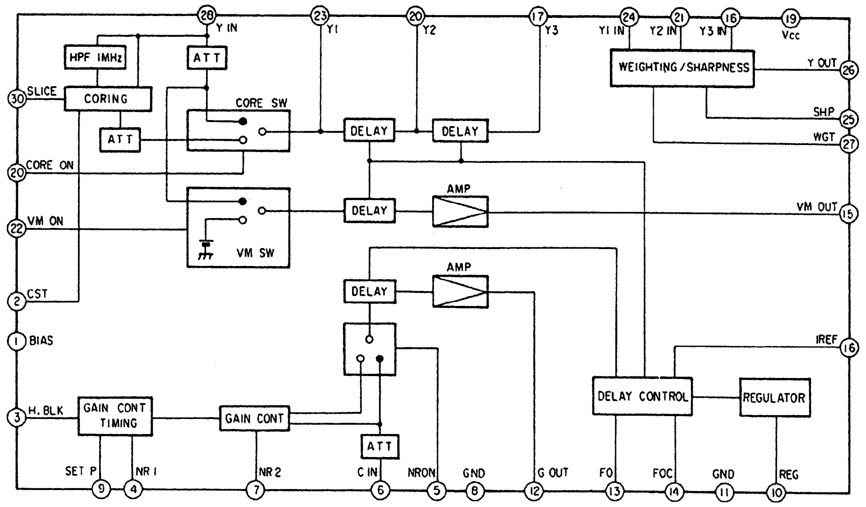
B BOARD

①  2.0Vp-p (H)	②  0.7Vp-p (H)	③  2.0Vp-p (H)
④  2.0Vp-p (H)	⑤  0.7Vp-p (H)	

B BOARD IC1304,1305 NJM2233BS

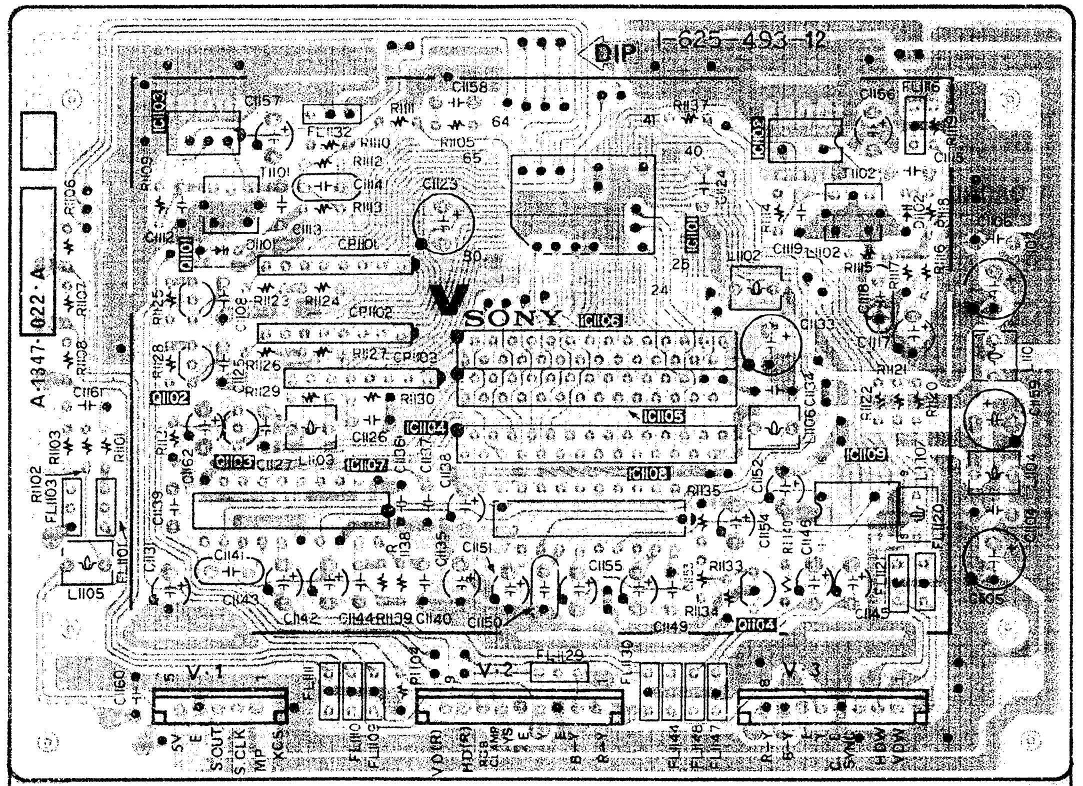

BUFFER
BIAS
Vcc
V OUT
GND
VIN 1
CTL
VIN 2
①
②
③
④
⑤
⑥
⑦
⑧
⑨

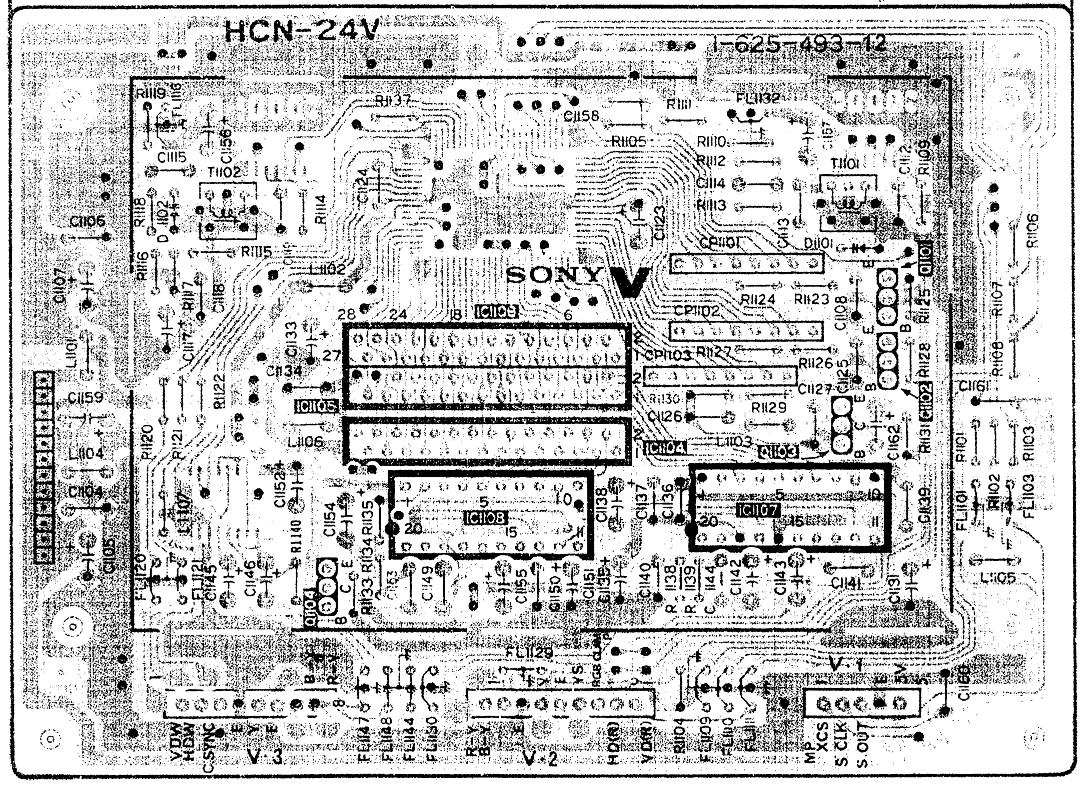
B BOARD IC1302 CXA1387S

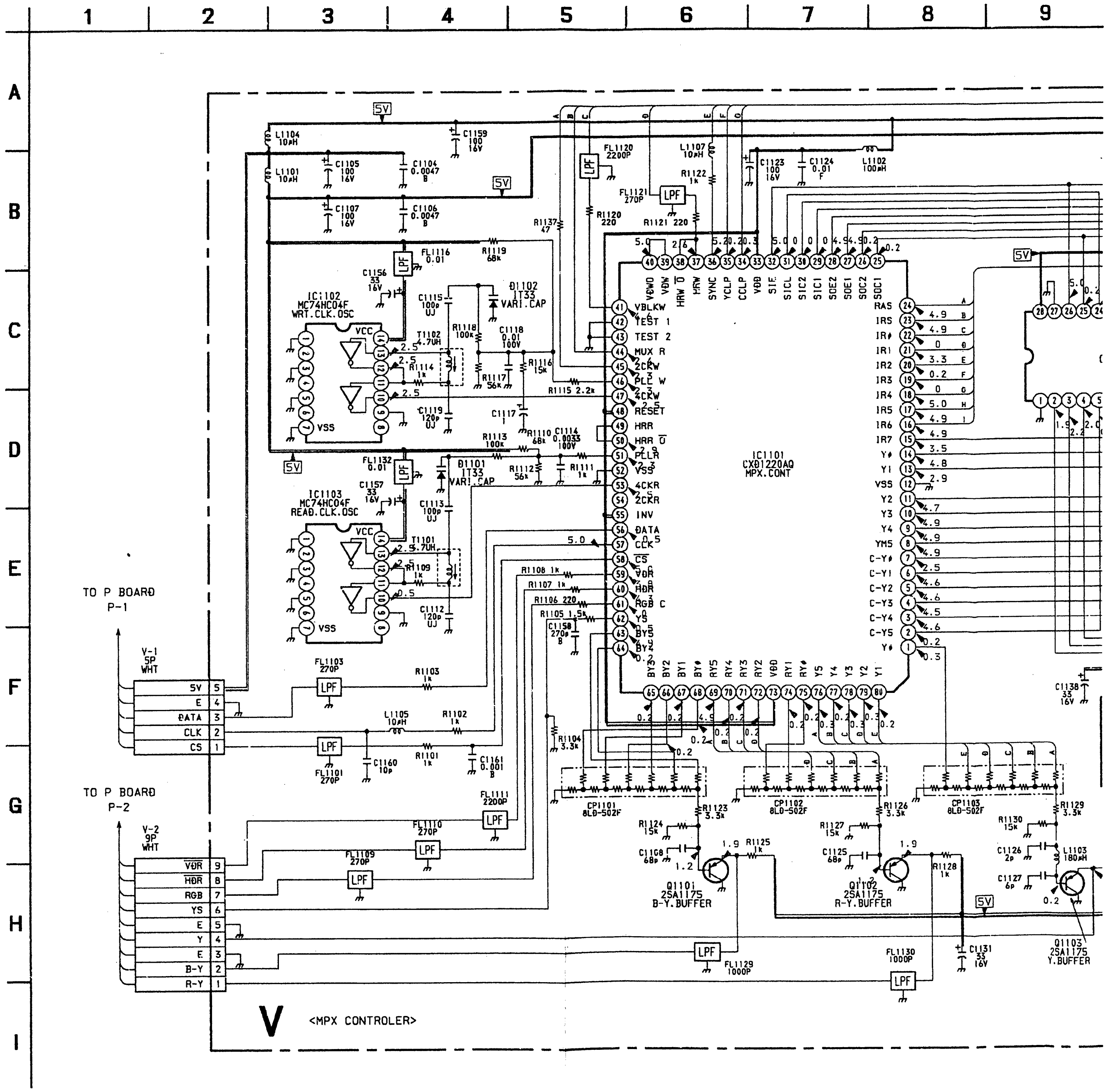

Y IN
Y1
Y2
Y3
Y1 IN
Y2 IN
Y3 IN
Vcc
HPF 1MHz
ATT
CORING
CORE SW
ATT
DELAY
DELAY
WEIGHTING/SHARPNESS
Y OUT
SHP
WGT
SLICE
CORE ON
VM ON
VM SW
DELAY
AMP
VM OUT
DELAY
AMP
CST
BIAS
IREF
H. BLK
GAIN CONT TIMING
GAIN CONT
ATT
DELAY CONTROL
REGULATOR
SET P
NR 1
NR 2
C IN
NRON
GND
G OUT
FO
FOC
GND
REG

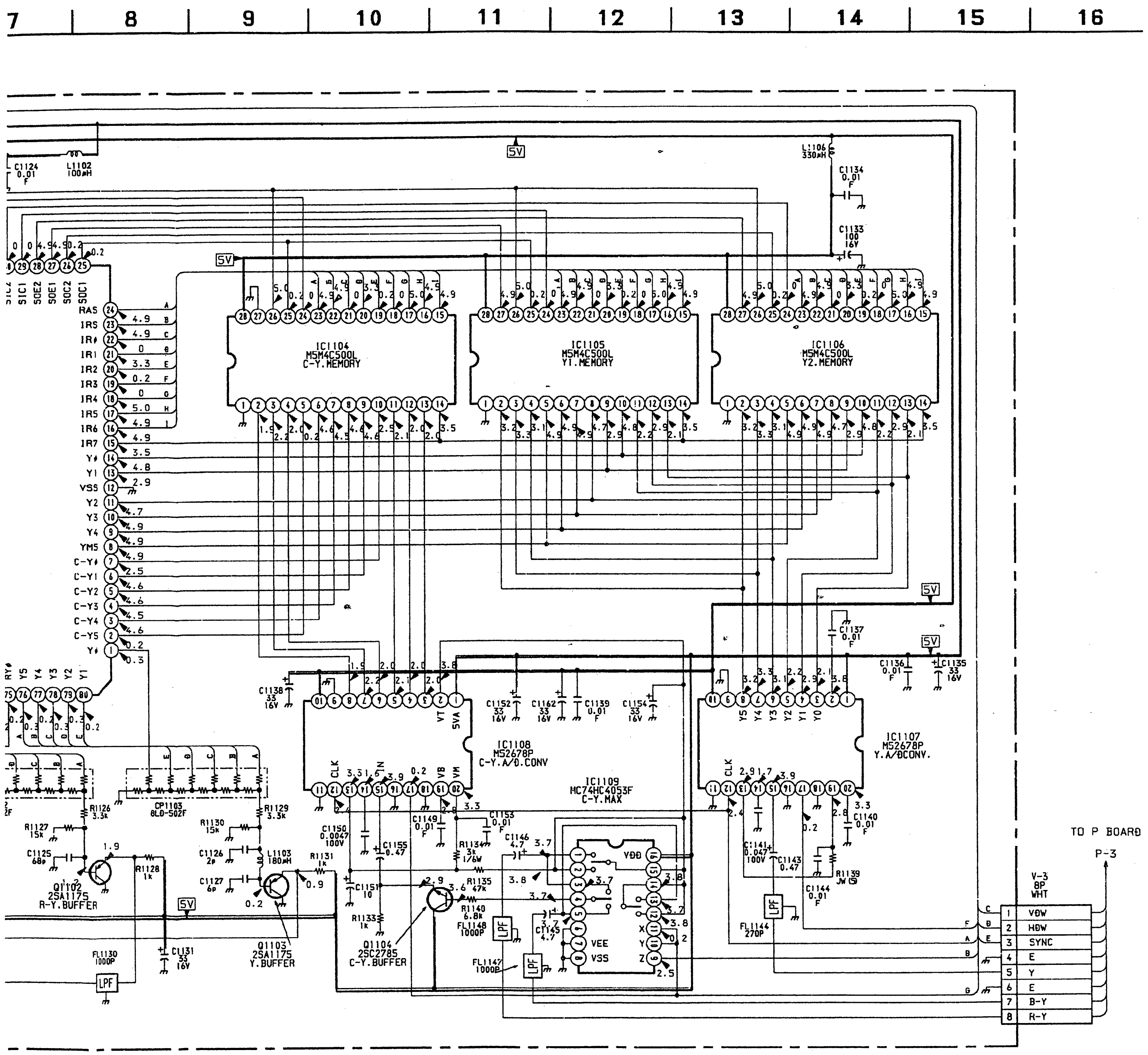
V [MPX CONTROLLER]

– V Board –

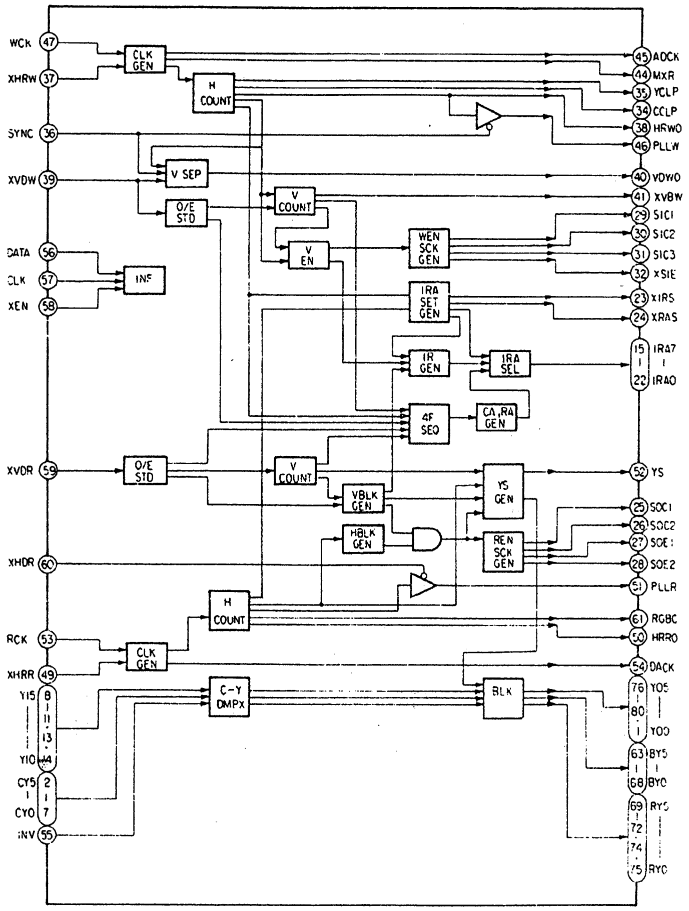

DIP
1-625-493-12
A-1347-022-A
SONY
V
V-1
V-2
V-3
IC1101
IC1102
IC1103
IC1104
IC1105
IC1106
IC1107
IC1108
IC1109


HCN-24V
1-625-493-12
SONY
V
V-1
V-2
V-3
IC1103
IC1104
IC1105
IC1106
IC1107
IC1108


1
2
3
4
5
6
7
8
9
A
B
C
D
E
F
G
H
I
TO P BOARD
P-1
V-1
5P
WHT
5V
E
DATA
CLK
CS
TO P BOARD
P-2
V-2
9P
WHT
VDR
HDR
RGB
YS
E
Y
E
B-Y
R-Y
IC1101
CXD1220AQ
MPX.CONT
IC1102
MC74HC04F
WRT.CLK.OSC
IC1103
MC74HC04F
READ.CLK.OSC
D1101
1T33
VARI.CAP
D1102
1T33
VARI.CAP
T1101
T1102
Q1101
2SA1175
B-Y.BUFFER
Q1102
2SA1175
R-Y.BUFFER
Q1103
2SA1175
Y.BUFFER
CP1101
8LD-502F
CP1102
8LD-502F
CP1103
8LD-502F
LPF
5V
VSS
VCC
V
<MPX CONTROLER>


7
8
9
10
11
12
13
14
15
16
5V
IC1104
M5M4C500L
C-Y.MEMORY
IC1105
M5M4C500L
Y1.MEMORY
IC1106
M5M4C500L
Y2.MEMORY
IC1108
M52678P
C-Y.A/D.CONV
IC1109
MC74HC4053F
C-Y.MAX
IC1107
M52678P
Y.A/DCONV.
Q1102
2SA1175
R-Y.BUFFER
Q1103
2SA1175
Y.BUFFER
Q1104
2SC2785
C-Y.BUFFER
L1102
100μH
L1103
180μH
L1106
330μH
CP1103
8LD-502F
FL1130
1000P
FL1144
270P
FL1147
1000P
FL1148
1000P
LPF
RAS
IRS
IR0
IR1
IR2
IR3
IR4
IR5
IR6
IR7
Y0
Y1
VSS
Y2
Y3
Y4
YMS
C-Y0
C-Y1
C-Y2
C-Y3
C-Y4
C-YS
SIC1
SOE2
SOE1
SOC2
SOC1
VDD
VEE
VSS
TO P BOARD
P-3
V-3
8P
WHT
1 VDW
2 HDW
3 SYNC
4 E
5 Y
6 E
7 B-Y
8 R-Y

V BOARD IC1101 CXD1220AQ


WCK 47
XHRW 37
SYNC 36
XVDW 39
DATA 56
CLK 57
XEN 58
XVDR 59
XHDR 60
RCK 53
XHRR 49
YI5 8
11
13
YI0 14
CY5 2
CY0 7
INV 55
CLK GEN
H COUNT
V SEP
O/E STD
V COUNT
V EN
INF
WEN SCK GEN
IRA SET GEN
IR GEN
IRA SEL
4F SEQ
CA,RA GEN
VBLK GEN
HBLK GEN
YS GEN
REN SCK GEN
C-Y DMPX
BLK
45 ADCK
44 MXR
35 YCLP
34 CCLP
38 HRWO
46 PLLW
40 VDWO
41 XVBW
29 SIC1
30 SIC2
31 SIC3
32 XSIE
23 XIRS
24 XRAS
15 IRA7
22 IRA0
52 YS
25 SOC1
26 SOC2
27 SOE1
28 SOE2
51 PLLR
61 RGBC
50 HRRO
54 DACK
76 YO5
80
1 YO0
63 BY5
68 BY0
69 RY5
72
74
75 RY0

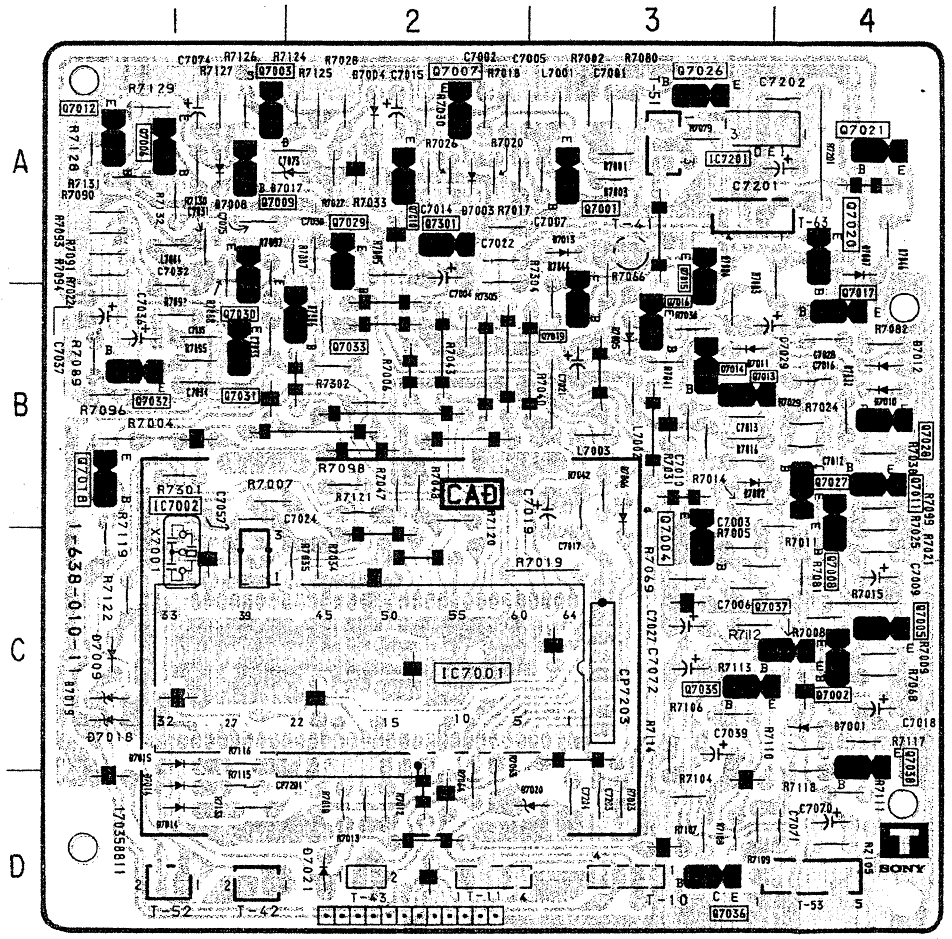
[ASC] **T**

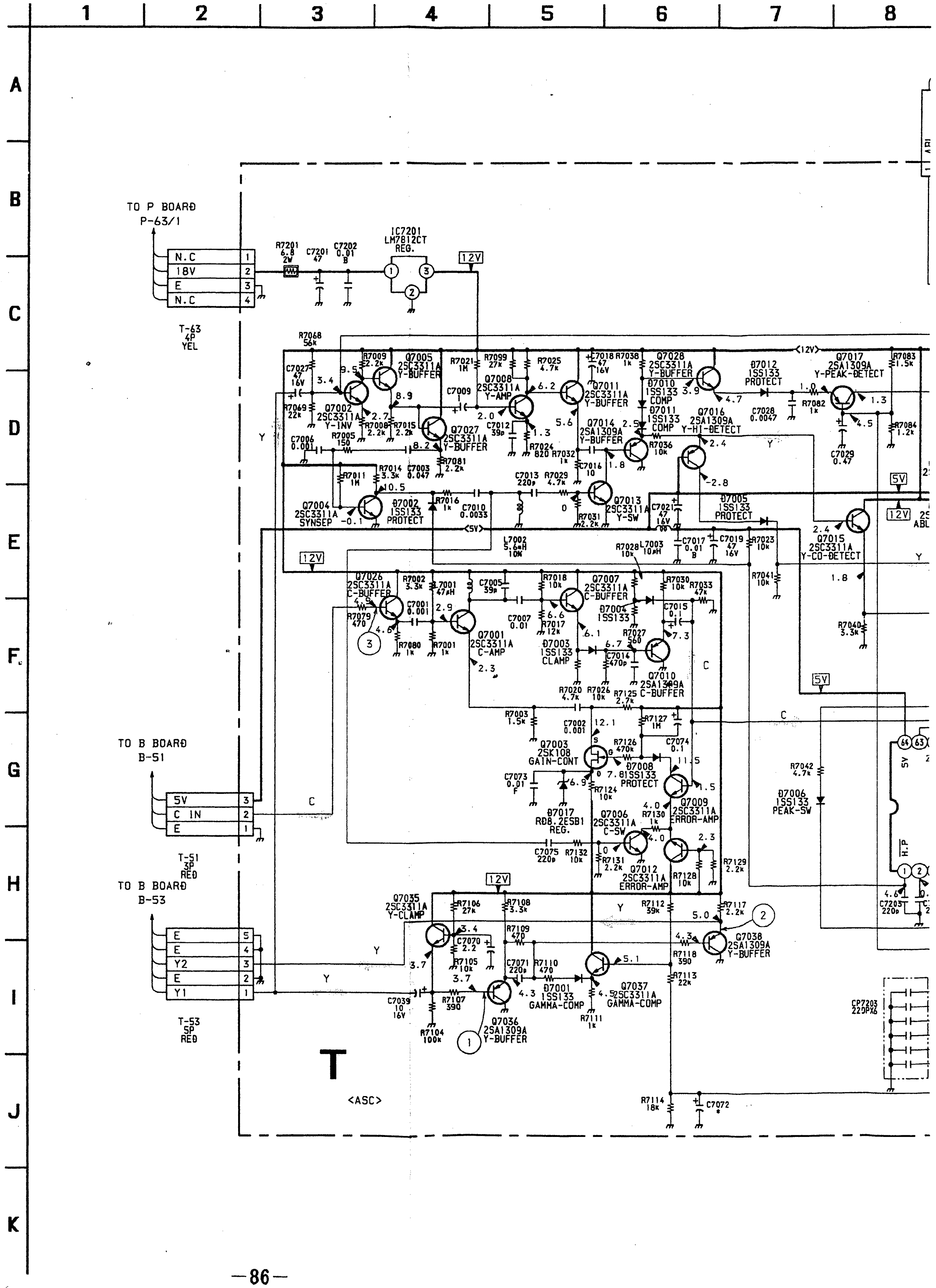
IC	
IC7001	C-2
IC7002	C-1
IC7201	A-3

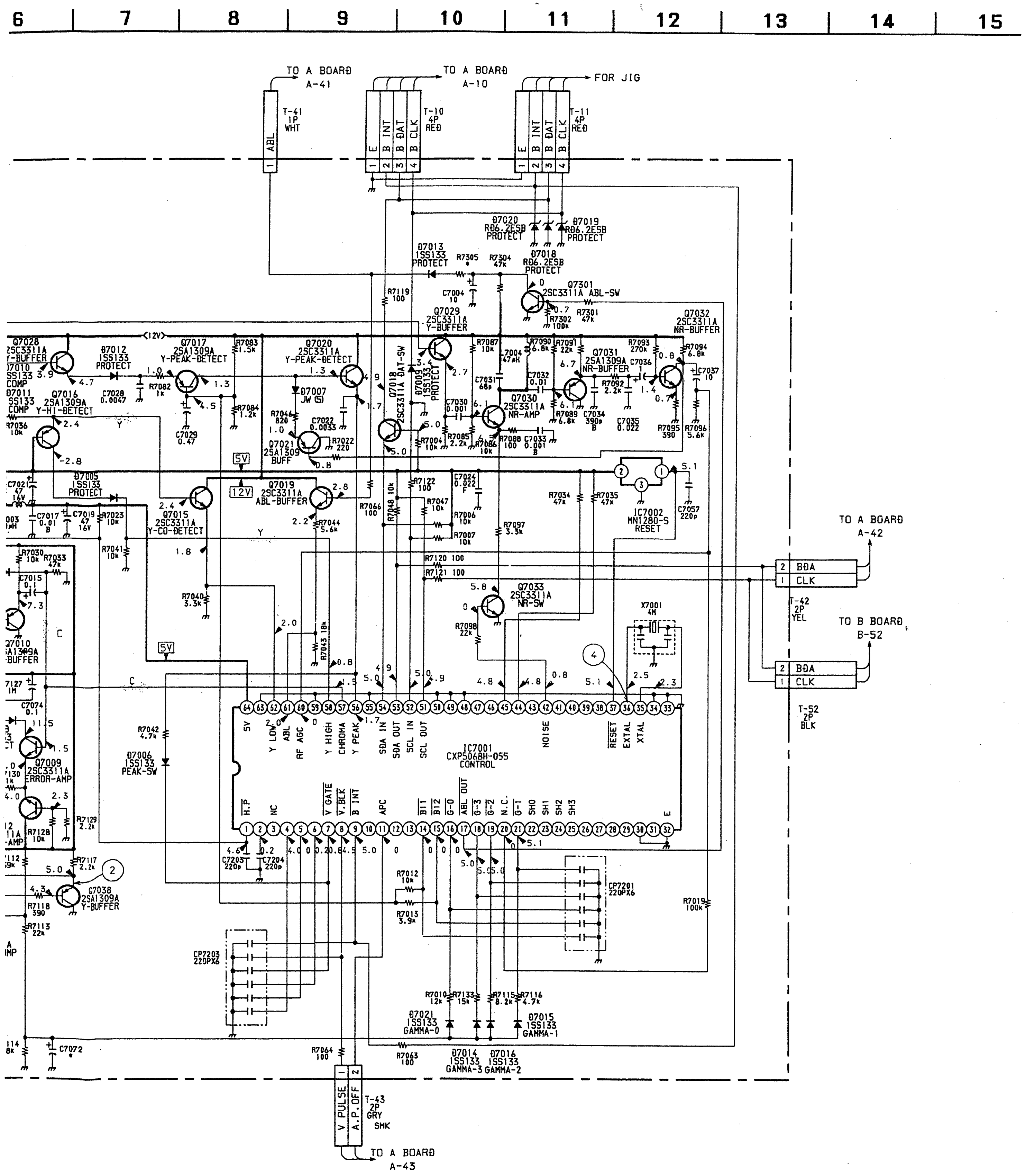
TRANSISTOR	
Q7001	A-3
Q7002	C-4
Q7003	A-1
Q7004	C-3
Q7005	C-4
Q7006	A-1
Q7007	A-2
Q7008	B-4
Q7009	A-1
Q7010	A-2
Q7011	B-4
Q7012	A-1
Q7013	B-3
Q7014	B-3
Q7015	A-3
Q7016	B-3
Q7017	B-4
Q7018	B-1
Q7019	B-3
Q7020	A-4
Q7021	A-4
Q7026	A-3
Q7027	B-4
Q7028	B-4
Q7029	A-2
Q7030	A-1
Q7031	B-1
Q7032	B-1
Q7033	B-2
Q7035	C-3
Q7036	D-3
Q7037	C-4
Q7038	C-4
Q7301	A-2

DIODE	
D7001	C-4
D7002	B-3
D7003	A-2
D7004	A-2
D7005	B-3
D7006	B-3
D7008	A-1
D7009	C-1
D7010	B-4
D7011	B-3
D7012	B-4
D7013	A-3
D7014	D-1
D7015	C-1
D7016	D-1
D7017	A-1
D7018	C-1
D7019	C-1
D7020	D-3
D7021	D-2

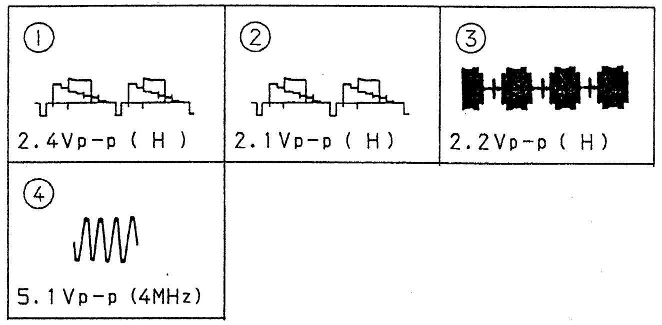
– T Board –


1
2
3
4
A
B
C
D
IC7001
IC7002
IC7201
CAD
T-52
T-42
T-63
T-11
T-10
T-53
T-51
1-638-010-11
SONY
T


1
2
3
4
5
6
7
8
A
B
C
D
E
F
G
H
I
J
K
TO P BOARD
P-63/1
N.C
18V
E
N.C
T-63
4P
YEL
IC7201
LM7812CT
REG.
12V
5V
TO B BOARD
B-51
5V
C IN
E
T-51
3P
RED
TO B BOARD
B-53
E
E
Y2
E
Y1
T-53
5P
RED
Q7004
2SC3311A
SYNSEP
Q7002
2SC3311A
Y-INV
Q7005
2SC3311A
Y-BUFFER
Q7008
2SC3311A
Y-AMP
Q7027
2SC3311A
Y-BUFFER
Q7011
2SC3311A
Y-BUFFER
Q7014
2SA1309A
COMP
Q7028
2SC3311A
Y-BUFFER
D7010
1SS133
COMP
D7011
1SS133
COMP
Q7016
2SA1309A
Y-HI-DETECT
D7012
1SS133
PROTECT
Q7017
2SA1309A
Y-PEAK-DETECT
D7002
1SS133
PROTECT
Q7013
2SC3311A
Y-SW
D7005
1SS133
PROTECT
Q7015
2SC3311A
Y-CD-DETECT
Q7026
2SC3311A
C-BUFFER
Q7001
2SC3311A
C-AMP
D7003
1SS133
CLAMP
Q7007
2SC3311A
C-BUFFER
D7004
1SS133
Q7010
2SC3309A
C-BUFFER
Q7003
2SK108
GAIN-CONT
D7008
1SS133
PROTECT
Q7009
2SC3311A
ERROR-AMP
D7017
RD8.2ESB1
REG.
Q7006
2SC3311A
C-SW
Q7012
2SC3311A
ERROR-AMP
D7006
1SS133
PEAK-SW
Q7035
2SC3311A
Y-CLAMP
D7001
1SS133
GAMMA-COMP
Q7037
2SC3311A
GAMMA-COMP
Q7036
2SA1309A
Y-BUFFER
Q7038
2SA1309A
Y-BUFFER
CP7203
220PX6
T
<ASC>


6
7
8
9
10
11
12
13
14
15
TO A BOARD A-41
T-41 1P WHT
ABL
TO A BOARD A-10
T-10 4P RED
E
B INT
B DAT
B CLK
FOR JIG
T-11 4P RED
D7020 RD6.2ESB PROTECT
D7019 RD6.2ESB PROTECT
D7013 1SS133 PROTECT
D7018 RD6.2ESB PROTECT
Q7301 2SC3311A ABL-SW
Q7029 2SC3311A Y-BUFFER
Q7032 2SC3311A NR-BUFFER
Q7028 2SC3311A Y-BUFFER
D7012 1SS133 PROTECT
Q7017 2SA1309A Y-PEAK-DETECT
Q7020 2SC3311A Y-PEAK-DETECT
D7007 JW (S)
Q7021 2SA1309 BUFF
Q7018 2SC3311A DAT-SW
D7003 1SS133 PROTECT
Q7031 2SA1309A NR-BUFFER
Q7030 2SC3311A NR-AMP
Q7016 2SA1309A Y-HI-DETECT
D7005 1SS133 PROTECT
Q7015 2SC3311A Y-CO-DETECT
Q7019 2SC3311A ABL-BUFFER
IC7002 MN1280-S RESET
Q7033 2SC3311A NR-SW
X7001 4M
Q7010 2SA1309A BUFFER
Q7009 2SC3311A ERROR-AMP
D7006 1SS133 PEAK-SW
Q7038 2SA1309A Y-BUFFER
IC7001 CXP5068H-055 CONTROL
5V
Y LOW
ABL
RF AGC
Y HIGH
CHROMA
Y PEAK
SDA IN
SDA OUT
SCL IN
SCL OUT
NOISE
RESET
EXTAL
XTAL
H.P
NC
Y GATE
V.BLK
B INT
APC
B11
B12
G-0
ABL OUT
G-3
G-2
N.C
G-1
SH0
SH1
SH2
SH3
E
CP7201 220P X6
CP7203 220P X6
D7021 1SS133 GAMMA-0
D7014 1SS133 GAMMA-3
D7016 1SS133 GAMMA-2
D7015 1SS133 GAMMA-1
TO A BOARD A-42
BDA
CLK
T-42 2P YEL
TO B BOARD B-52
T-52 2P BLK
V PULSE
A.P.OFF
T-43 2P GRY SMK
TO A BOARD A-43
12V
5V
①
②
③
④

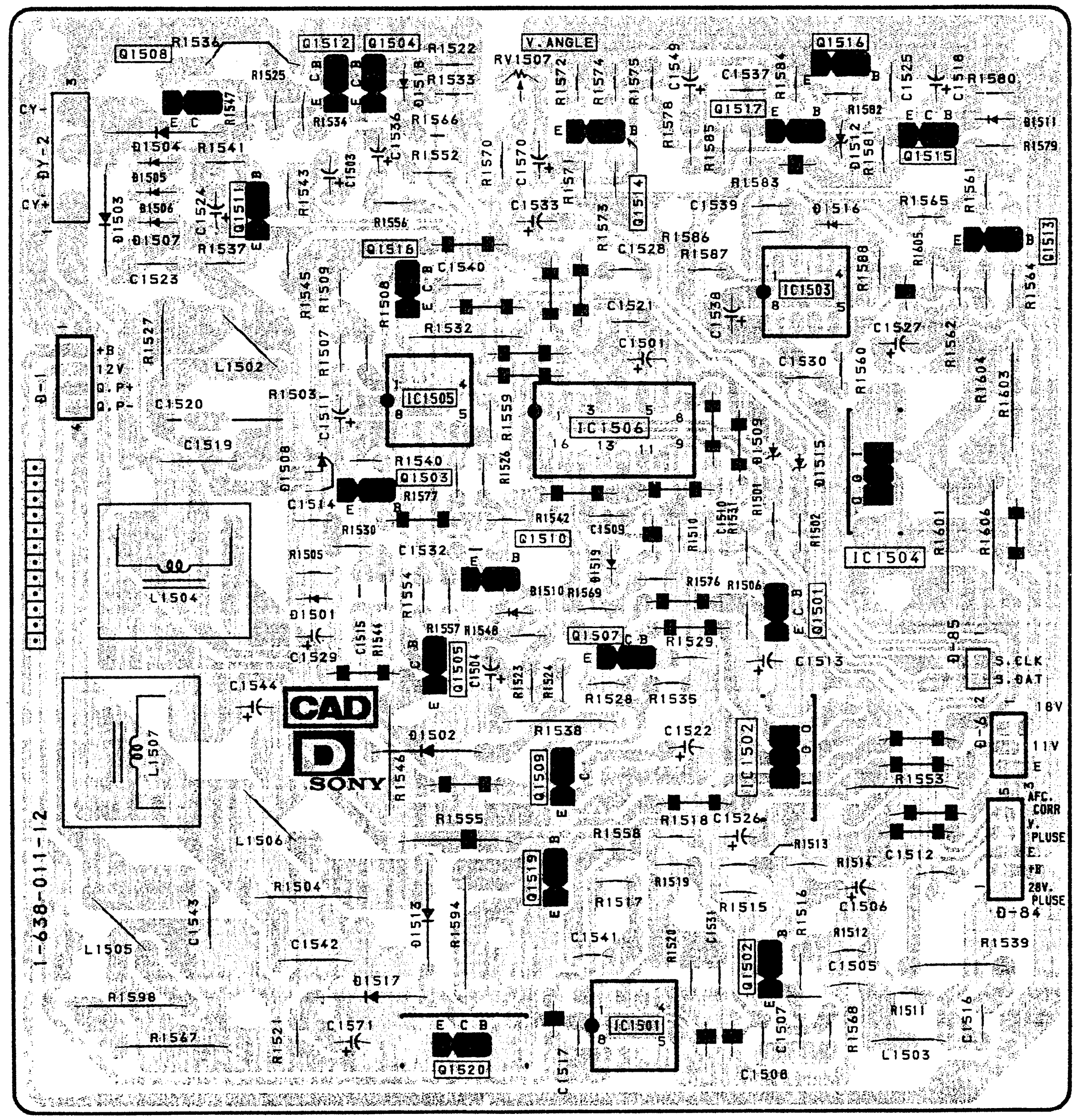
T BAORD

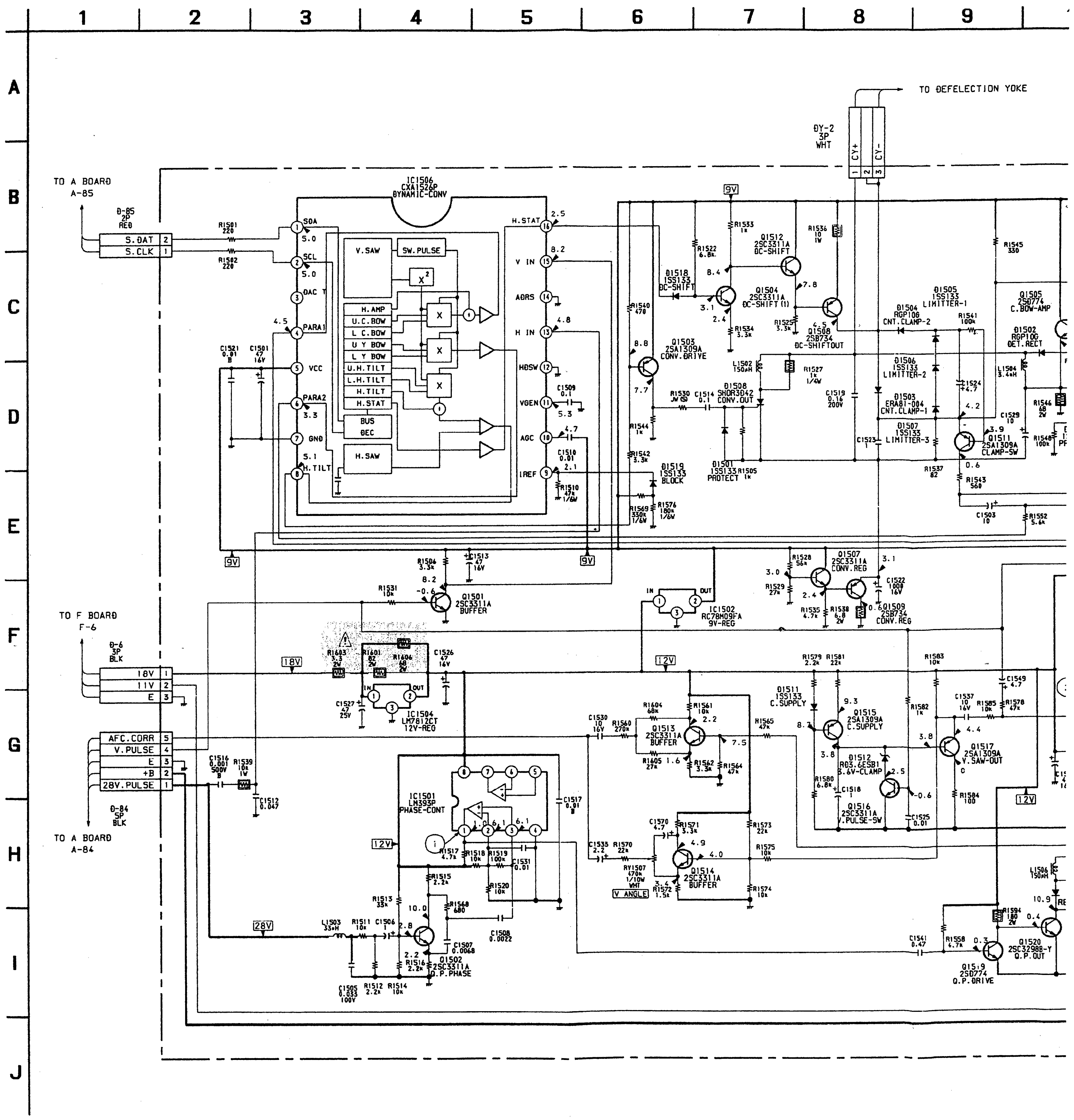

①
2.4Vp-p (H)
②
2.1Vp-p (H)
③
2.2Vp-p (H)
④
5.1Vp-p (4MHz)

DYNAMIC CONVERGERNSE
QUADRA-POLE
V ANGLE

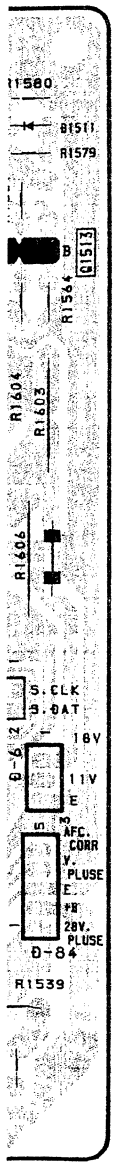
D

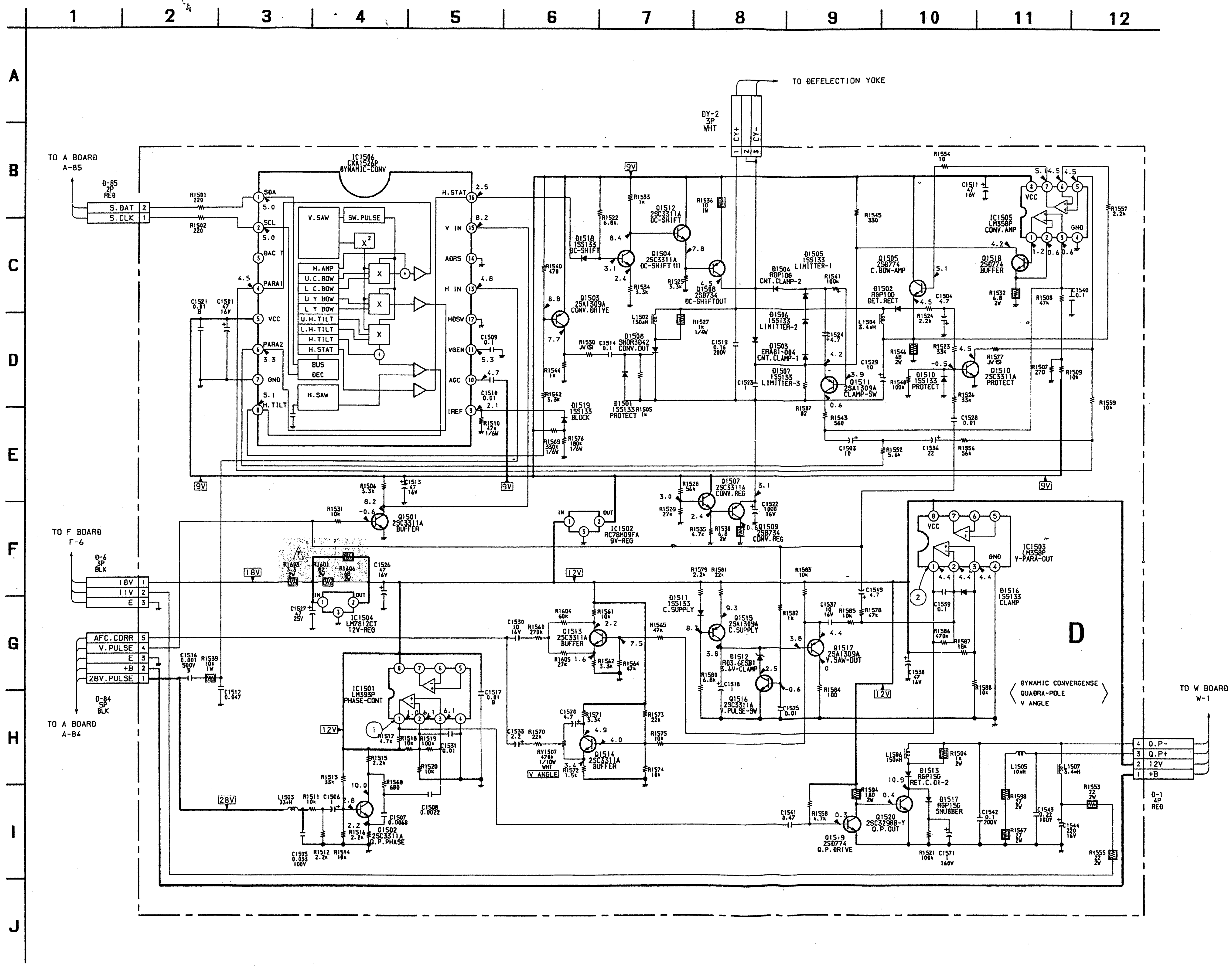
– D Board –


DY-2
CY+
CY-
D-1
+B
12V
Q.P+
Q.P-
IC1501
IC1502
IC1503
IC1504
IC1505
IC1506
V.ANGLE
RV1507
L1502
L1503
L1504
L1505
L1506
L1507
D-85
S.CLK
S.DAT
D-6
18V
11V
E
D-84
AFC.CORR
V.PLUSE
E
+B
28V.PLUSE
CAD
D
SONY
1-638-011-12

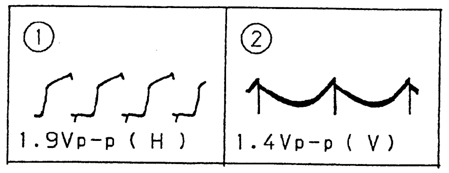

1
2
3
4
5
6
7
8
9
A
B
C
D
E
F
G
H
I
J
TO DEFELECTION YOKE
DY-2
3P
WHT
CY+
CY-
TO A BOARD
A-85
D-85
2P
RED
S.DAT
S.CLK
IC1506
CXA1526P
DYNAMIC-CONV
SDA
SCL
DAC
PARA1
VCC
PARA2
GND
H.TILT
V.SAW
SW.PULSE
H.AMP
U.C.BOW
L.C.BOW
U Y BOW
L Y BOW
U.H.TILT
L.H.TILT
H.TILT
H.STAT
BUS
DEC
H.SAW
H.STAT
V IN
ADRS
H IN
HDSW
VGEN
AGC
IREF
9V
18V
12V
28V
TO F BOARD
F-6
D-6
3P
BLK
18V
11V
E
AFC.CORR
V.PULSE
E
+B
28V.PULSE
D-84
5P
BLK
TO A BOARD
A-84
Q1501
2SC3311A
BUFFER
IC1502
RC78M09FA
9V-REG
IC1504
LM7812CT
12V-REG
IC1501
LM393P
PHASE-CONT
Q1502
2SC3311A
P.PHASE
Q1503
2SA1309A
CONV.DRIVE
Q1504
2SC3311A
DC-SHIFT
Q1505
2SD774
C.BOW-AMP
Q1507
2SC3311A
CONV.REG
Q1508
2SB734
DC-SHIFTOUT
Q1509
2SB734
CONV.REG
Q1511
2SA1309A
CLAMP-SW
Q1512
2SC3311A
DC-SHIFT
Q1513
2SC3311A
BUFFER
Q1514
2SC3311A
BUFFER
Q1515
2SA1309A
C.SUPPLY
Q1516
2SC3311A
V.PULSE-SW
Q1517
2SA1309A
Y.SAW-OUT
Q1519
2SD774
Q.P.DRIVE
Q1520
2SC3298B-Y
Q.P.OUT
D1502
RGP10G
GET.RECT
D1503
ERA81-004
CNT.CLAMP-1
D1504
RGP10G
CNT.CLAMP-2
D1505
1SS133
LIMITTER-1
D1506
1SS133
LIMITTER-2
D1507
1SS133
LIMITTER-3
D1508
SH0R3042
CONV.OUT
D1511
1SS133
C.SUPPLY
D1512
RD5.6ESB1
5.6V-CLAMP
D1515
1SS133
BLOCK
D1518
1SS133
DC-SHIFT
RV1507
V ANGLE

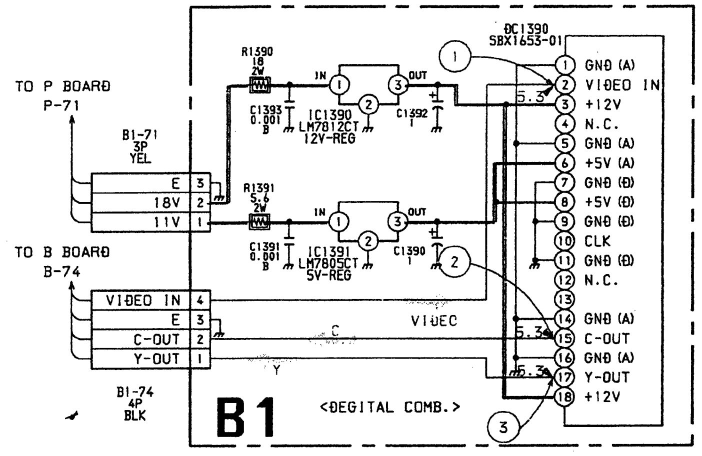
D


R1580
D1511
R1579
Q1513
R1564
R1604
R1603
R1606
S.CLK
S.DAT
D-6
18V
11V
E
AFC.CORR
V.PLUSE
E
+B
28V.PLUSE
D-84
R1539

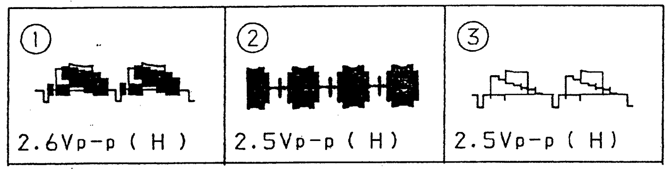

1
2
3
4
5
6
7
8
9
10
11
12
A
B
C
D
E
F
G
H
I
J
TO DEFELECTION YOKE
DY-2 3P WHT
CY+
CY-
TO A BOARD A-85
D-85 2P RED
S.DAT
S.CLK
R1581 220
R1582 220
IC1506 CXA1524P DYNAMIC-CONV
SDA
SCL
DAC T
PARA1
VCC
PARA2
GND
H.TILT
V.SAW
SW.PULSE
H.AMP
U.C.BOW
L.C.BOW
U.Y.BOW
L.Y.BOW
U.H.TILT
L.H.TILT
H.TILT
H.STAT
BUS DEC
H.SAW
H.STAT
V IN
ADRS
H IN
HDSW
VGEN
AGC
IREF
9V
Q1512 2SC3311A DC-SHIFT
Q1518 1SS133 DC-SHIFT
Q1504 2SC3311A DC-SHIFT (I)
Q1506 2SB734 DC-SHIFTOUT
Q1503 2SA1309A CONV.DRIVE
D1508 SHDR3042 CONV.OUT
D1501 1SS133 PROTECT
D1519 1SS133 BLOCK
D1504 RGP10D CNT.CLAMP-2
D1505 1SS133 LIMITTER-1
D1506 1SS133 LIMITTER-2
D1503 ERA81-004 CNT.CLAMP-1
D1507 1SS133 LIMITTER-3
Q1505 2SD774 C.BOW-AMP
D1502 RGP10D DET.RECT
Q1511 2SA1309A CLAMP-SW
D1510 1SS133 PROTECT
Q1510 2SC3311A PROTECT
IC1505 LM358P CONV.AMP
Q1518 2SD774 BUFFER
Q1501 2SC3311A BUFFER
IC1502 RC78M09FA 9V-REG
Q1507 2SC3311A CONV.REG
Q1509 2SB734 CONV.REG
IC1503 LM358P Y-PARA-OUT
D1516 1SS133 CLAMP
TO F BOARD F-6
D-6 3P BLK
18V
11V
E
IC1504 LM7812CT 12V-REG
12V
D1511 1SS133 C.SUPPLY
Q1515 2SA1309A C.SUPPLY
D1512 RD5.6ESB1 5.6V-CLAMP
Q1516 2SC3311A V.PULSE-SW
Q1517 2SA1309A V.SAW-OUT
AFC.CORR
V.PULSE
E
+B
28V.PULSE
D-84 5P BLK
TO A BOARD A-84
IC1501 LM393P PHASE-CONT
Q1513 2SC3311A BUFFER
Q1514 2SC3311A BUFFER
RV1507 V ANGLE
Q1502 2SC3311A D.P.PHASE
28V
D1513 RGP15G RET.C.01-2
D1517 RGP15G SNUBBER
Q1520 2SC3298B-Y Q.P.OUT
Q1519 2SD774 Q.P.DRIVE
D
DYNAMIC CONVERGENSE QUADRA-POLE V ANGLE
TO W BOARD W-1
Q.P-
Q.P+
12V
+B
D-1 4P RED
①
②

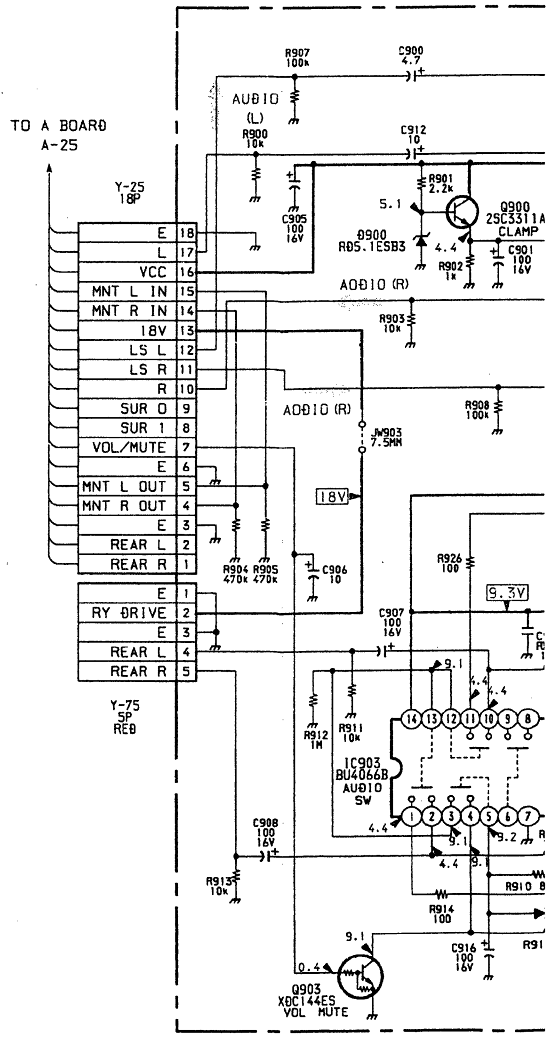
D BOARD

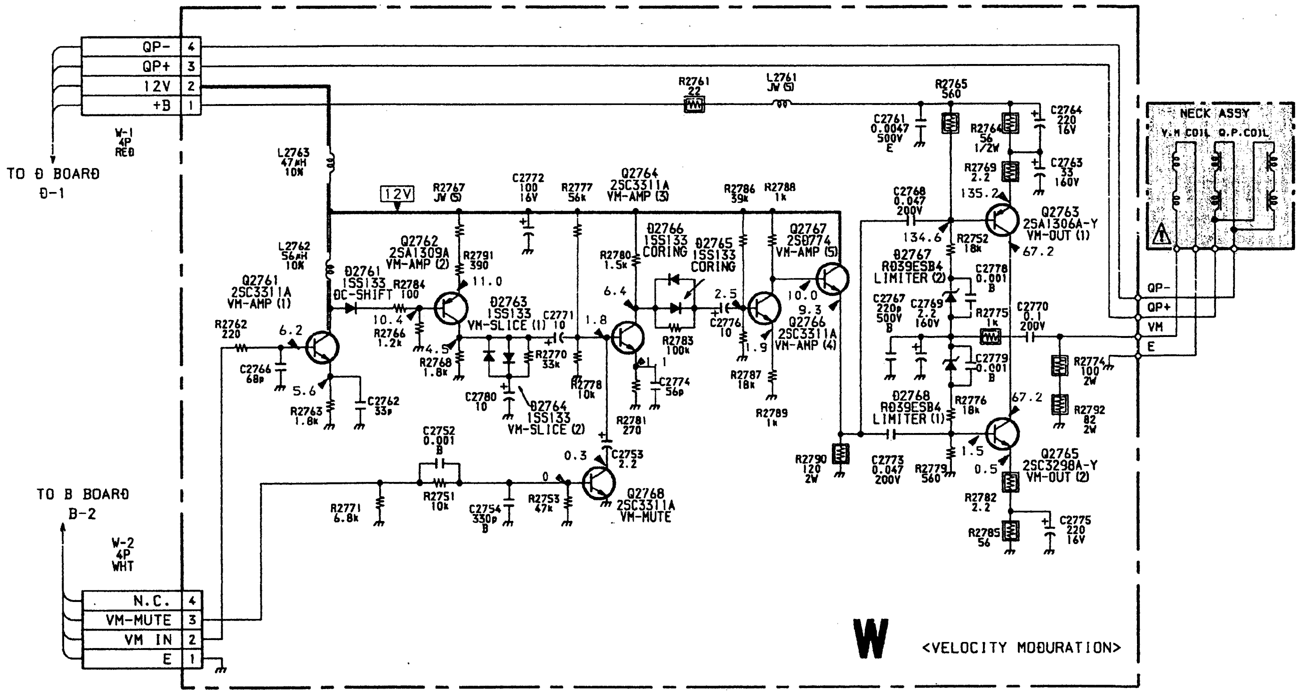

①
1.9Vp-p (H)
②
1.4Vp-p (V)


TO P BOARD
P-71
B1-71
3P
YEL
E
18V
11V
TO B BOARD
B-74
VIDEO IN
E
C-OUT
Y-OUT
B1-74
4P
BLK
R1590
R1391
C1393
C1391
IC1390
LM7812CT
12V-REG
IC1391
LM7805CT
5V-REG
C1392
C1390
IN
OUT
DC1390
SBX1653-01
GND (A)
VIDEO IN
+12V
N.C.
GND (A)
+5V (A)
GND (D)
+5V (D)
GND (D)
CLK
GND (D)
N.C.
GND (A)
C-OUT
GND (A)
Y-OUT
+12V
VIDEO
C
Y
5.3
B1
<DEGITAL COMB.>

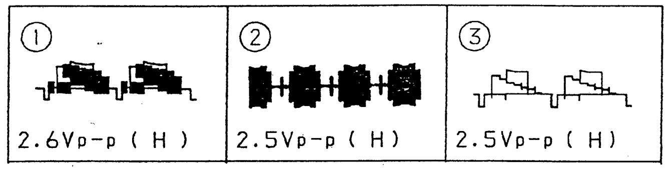
B1 BOARD

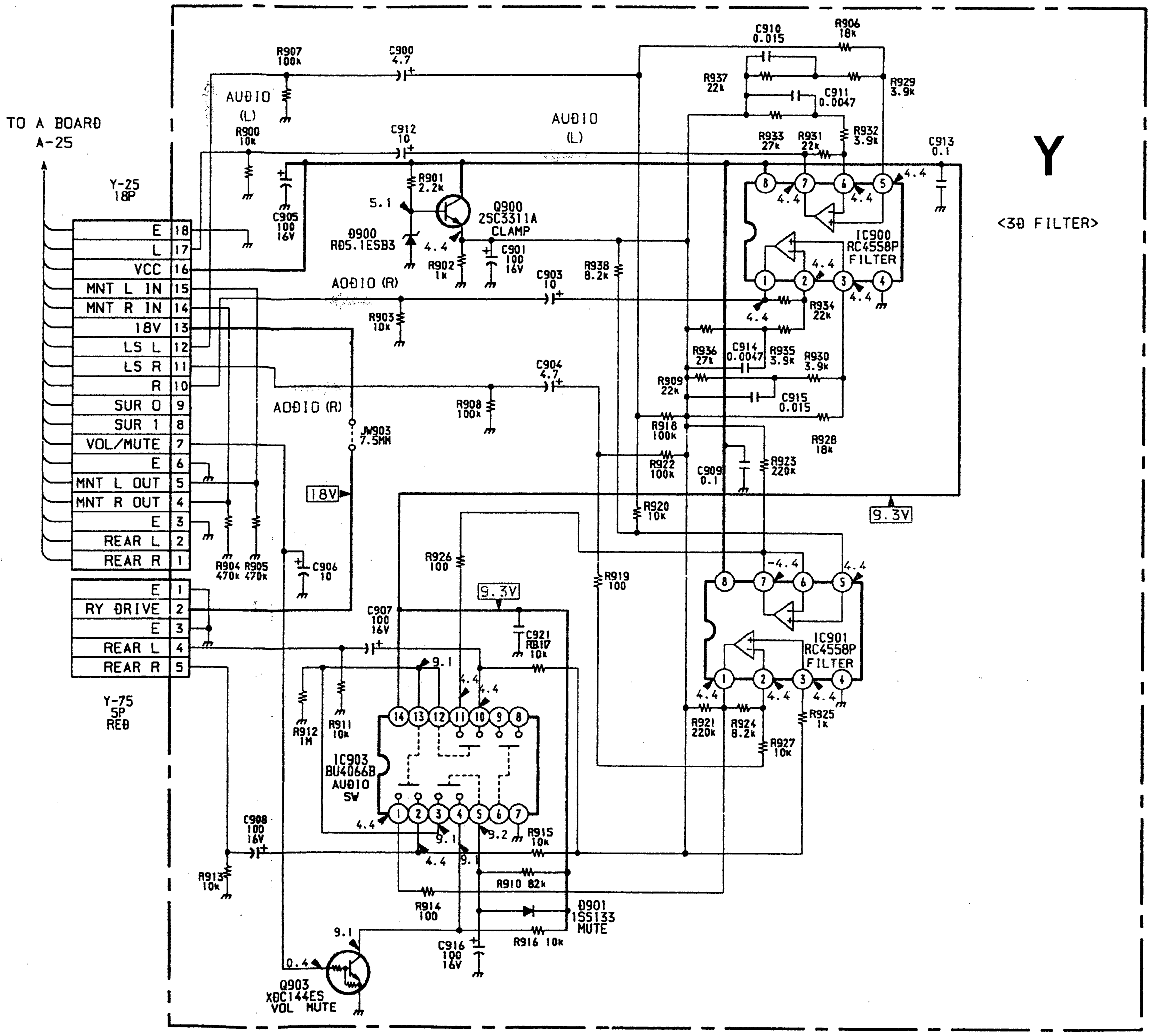

①
2.6Vp-p (H)
②
2.5Vp-p (H)
③
2.5Vp-p (H)

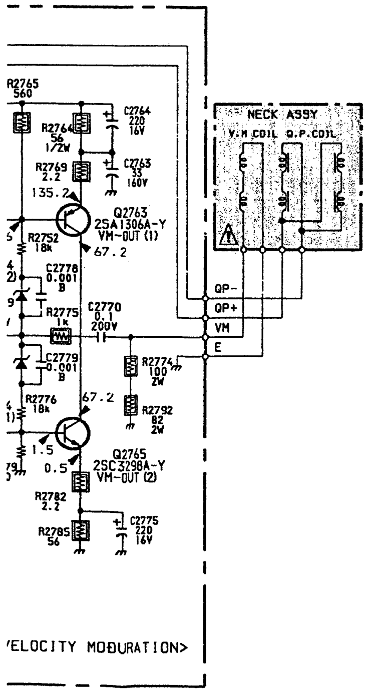

TO A BOARD
A-25
Y-25
18P
E
L
VCC
MNT L IN
MNT R IN
18V
LS L
LS R
R
SUR O
SUR 1
VOL/MUTE
E
MNT L OUT
MNT R OUT
E
REAR L
REAR R
E
RY DRIVE
E
REAR L
REAR R
Y-75
5P
RED
AUDIO (L)
AUDIO (R)
R907
C900
C912
R900
R901
C905
Q900
2SC3311A
CLAMP
D900
RD5.1ESB3
C901
R902
R903
R908
JW903
18V
R904
R905
C906
R926
9.3V
C907
R912
R911
IC903
BU4066B
AUDIO
SW
C908
R913
R914
R910
C916
Q903
XDC144ES
VOL MUTE


QP-
QP+
12V
+B
W-1
4P
RED
TO D BOARD
D-1
TO B BOARD
B-2
W-2
4P
WHT
N.C.
VM-MUTE
VM IN
E
L2763
L2762
12V
R2761
L2761
R2765
C2761
C2764
C2763
Q2761
2SC3311A
VM-AMP (1)
D2761
1SS133
DC-SHIFT
Q2762
2SA1309A
VM-AMP (2)
Q2763
1SS133
VM-SLICE (1)
D2764
1SS133
VM-SLICE (2)
Q2764
2SC3311A
VM-AMP (3)
D2766
1SS133
CORING
D2765
1SS133
CORING
Q2766
2SC3311A
VM-AMP (4)
Q2767
2SB774
VM-AMP (5)
D2767
RD39ESB4
LIMITER (2)
D2768
RD39ESB4
LIMITER (1)
Q2763
2SA1306A-Y
VM-OUT (1)
Q2765
2SC3298A-Y
VM-OUT (2)
Q2768
2SC3311A
VM-MUTE
NECK ASSY
V.M COIL
Q.P.COIL
QP-
QP+
VM
E
W
<VELOCITY MODURATION>

B1 BOARD

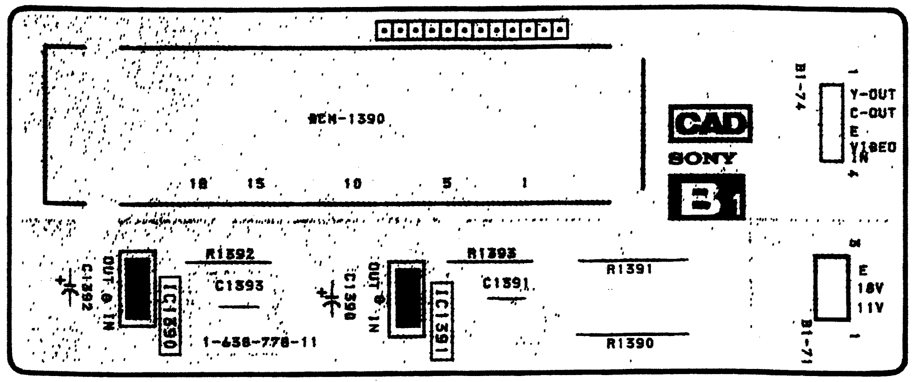

①
2.6Vp-p (H)
②
2.5Vp-p (H)
③
2.5Vp-p (H)


TO A BOARD
A-25
Y-25
18P
E
L
VCC
MNT L IN
MNT R IN
18V
LS L
LS R
R
SUR O
SUR 1
VOL/MUTE
E
MNT L OUT
MNT R OUT
E
REAR L
REAR R
E
RY DRIVE
E
REAR L
REAR R
Y-75
5P
RED
AUDIO (L)
AUDIO (R)
Q900
2SC3311A
CLAMP
D900
RD5.1ESB3
IC900
RC4558P
FILTER
IC901
RC4558P
FILTER
IC903
BU4066B
AUDIO SW
Q903
XDC144ES
VOL MUTE
D901
1SS133
MUTE
JW903
7.5MM
18V
9.3V
Y
<3D FILTER>


NECK ASSY
V.M COIL
Q.P.COIL
Q2763
2SA1306A-Y
VM-OUT (1)
Q2765
2SC3298A-Y
VM-OUT (2)
QP-
QP+
VM
E
/ELOCITY MODURATION>

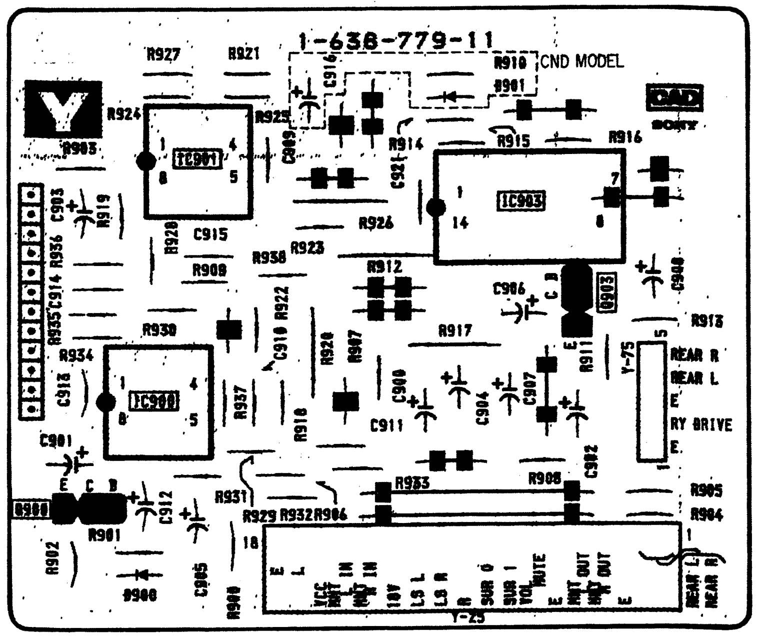
B1 [DEGITAL COMB.] **Y** [3D FILTER]

– B1 Board –



BCM-1390
CAD
SONY
B1
Y-OUT
C-OUT
E
VIDEO IN
B1-74
B1-71
E
18V
11V
R1392
C1393
C1392
IC1390
1-638-778-11
R1393
C1391
C1390
IC1391
R1391
R1390
18
15
10
5
1

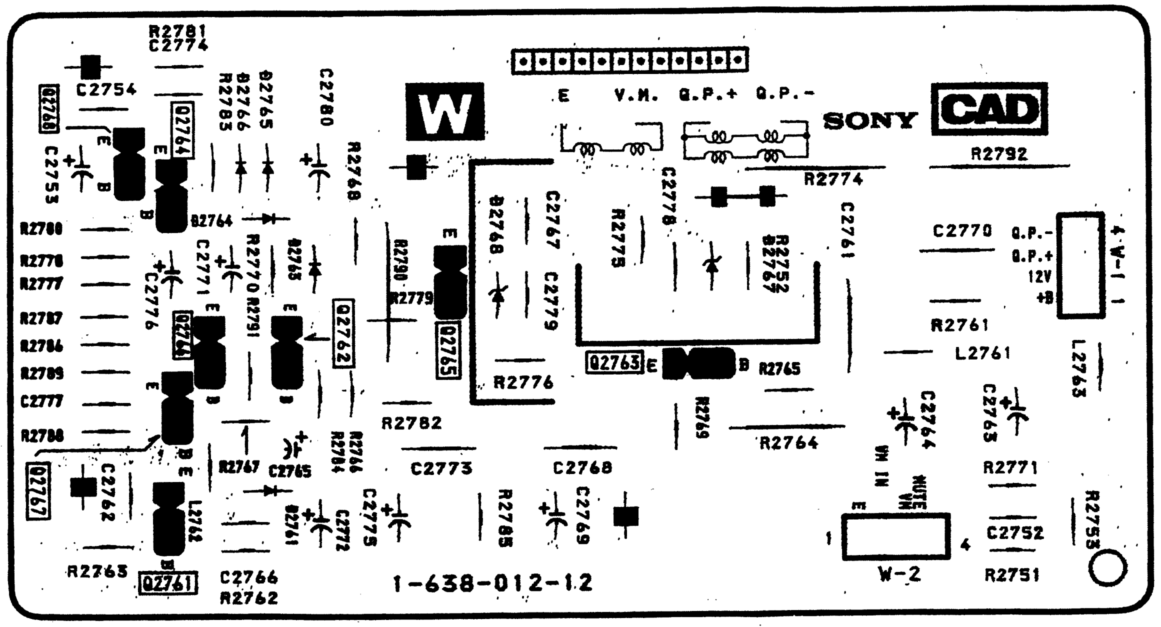
– Y Board –



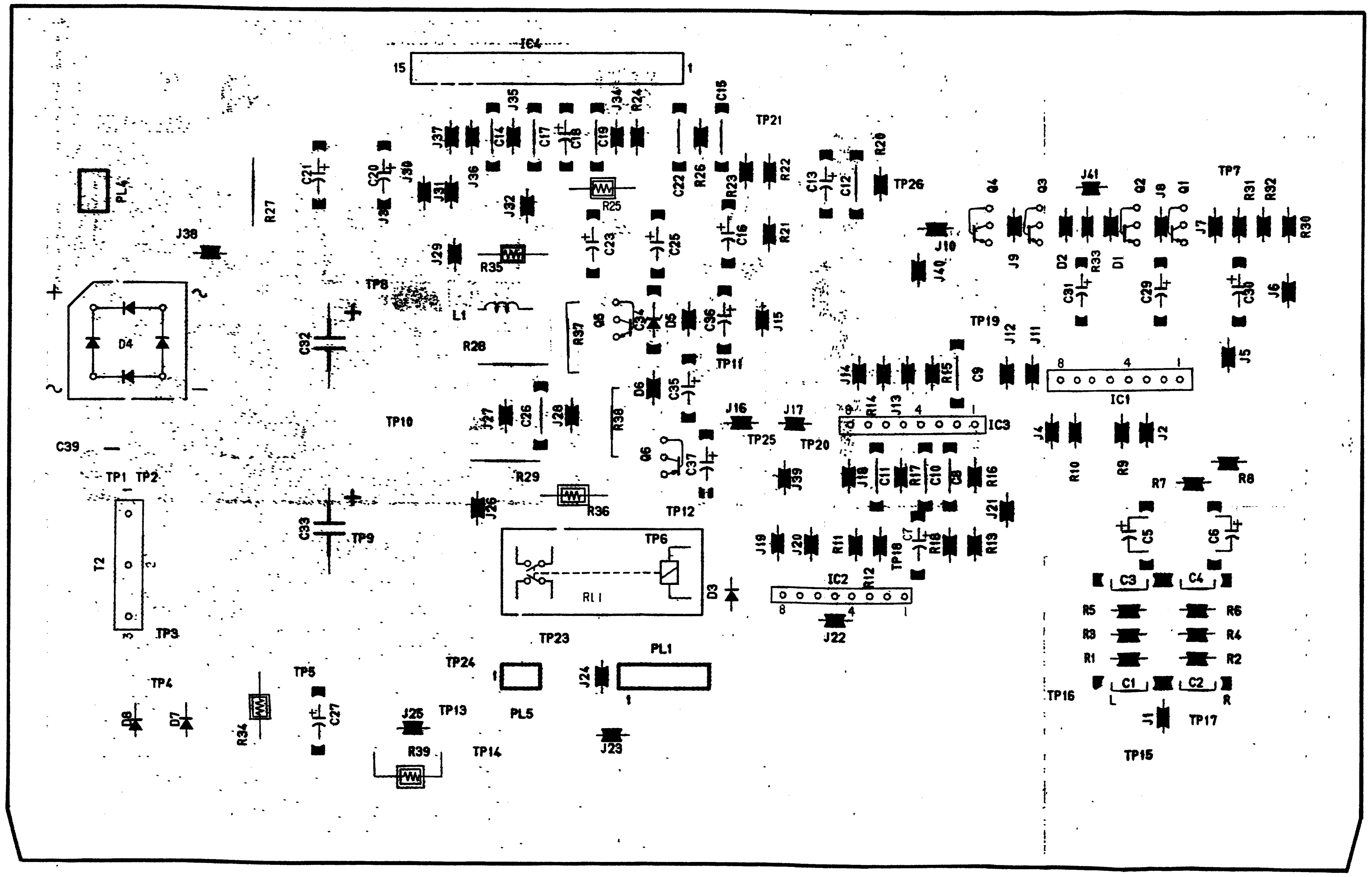
Y
1-638-779-11
CND MODEL
CAD
SONY
IC901
IC903
IC900
R927
R921
R924
R925
R914
R915
R916
R926
R923
R912
R917
R930
R934
R931
R933
R908
R905
R904
Q903
Q900
REAR R
REAR L
E
RY DRIVE
E
Y-75
Y-25

W [VELOCITY MODURATION]

– W Board –



W
SONY
CAD
E
V.M.
G.P.+
G.P.-
R2781
C2774
C2754
C2753
C2780
R2768
R2774
R2792
C2770
G.P.-
G.P.+
12V
+B
W-1
R2761
L2761
L2763
R2776
Q2763
R2765
R2782
R2764
C2773
C2768
C2769
R2785
C2763
C2764
R2771
C2752
R2751
R2753
W-2
R2763
Q2761
C2766
R2762
Q2767
Q2762
Q2765
Q2764
1-638-012-12


IC4
15
1
PL4
R27
J38
D4
+
~
-
C39
TP1 TP2
T2
TP3
TP4
D8
D7
R34
TP5
C27
TP8
C32
C33
TP9
TP10
C21
C20
J30
J31
J36
J37
C14
J35
C17
C18
C19
J34
R24
R25
J32
J29
R35
L1
R28
R37
Q5
C34
D5
C36
C15
R26
C22
R23
R22
C16
R21
C23
C25
J15
TP11
TP21
C13
C12
R20
TP26
J27
C26
J28
R29
R36
J26
D6
C35
R38
Q6
C37
TP12
J16
J17
TP25
TP20
RL1
TP6
D3
TP23
TP24
PL5
J24
PL1
J23
J25
TP13
TP14
R39
J39
J18
C11
R17
C10
C8
R16
J19
J20
R11
R12
TP18
C7
R18
R19
J21
IC2
J22
J14
R14
J13
R15
C9
IC3
J10
J40
Q4
Q3
J9
J41
Q2
J8
Q1
D2
R33
D1
J7
TP7
R31
R32
R30
C31
C29
C30
J6
J5
TP19
J12
J11
IC1
J4
R10
R9
J2
R7
R8
C5
C6
C3
C4
R5
R6
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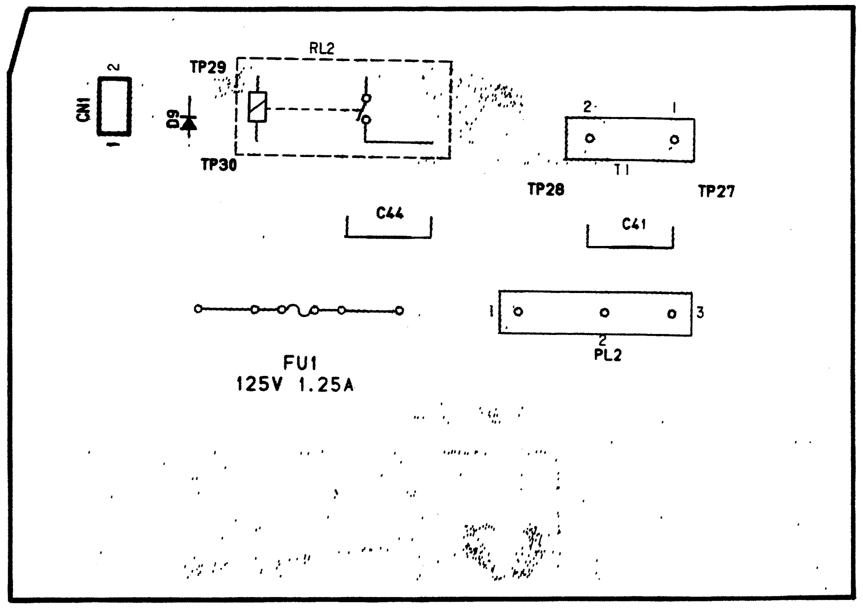
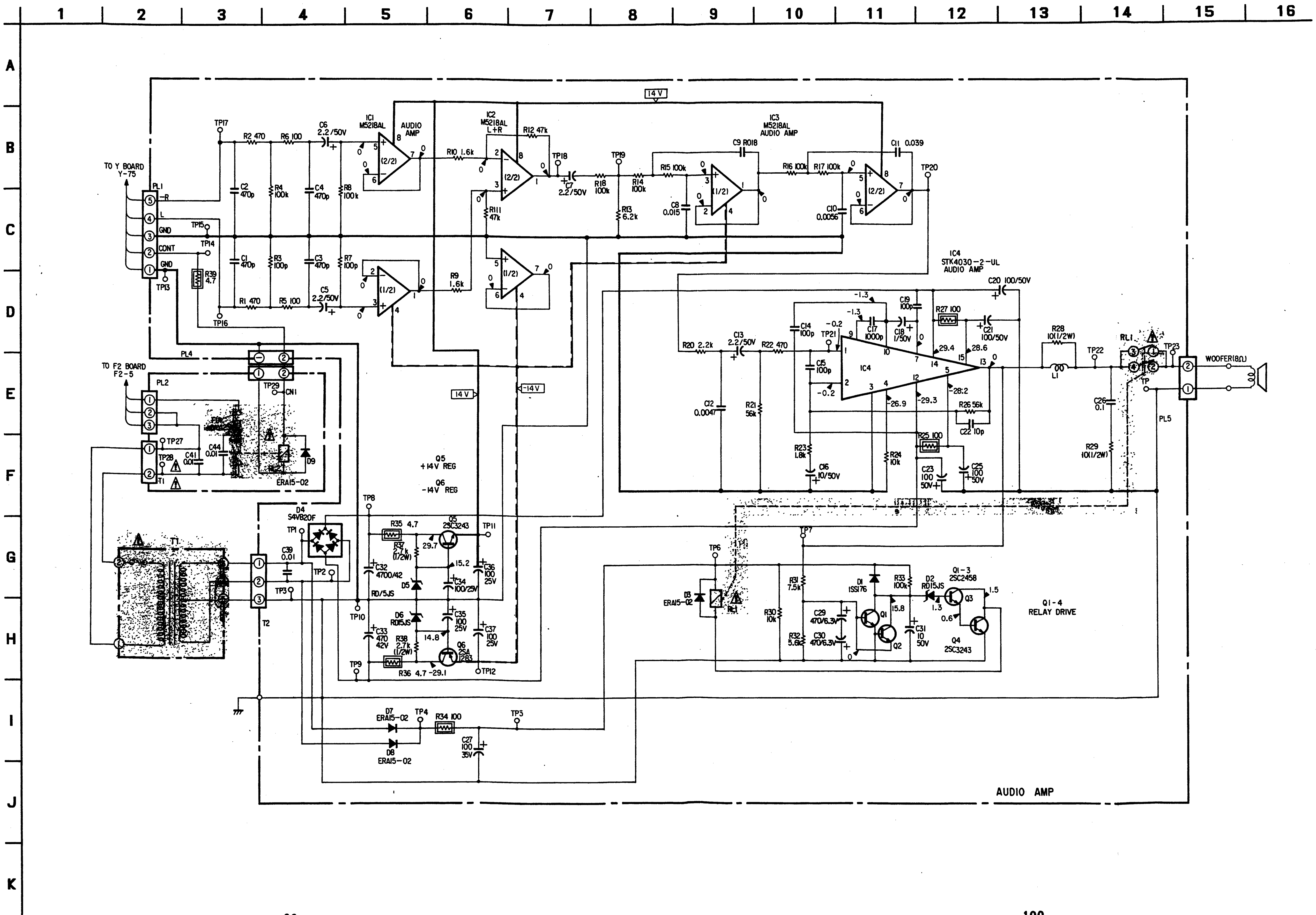
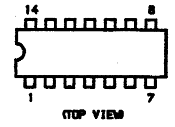
R
J1
TP16
TP17
TP15


CN1
D9
TP29
TP30
RL2
T1
TP28
TP27
C44
C41
PL2
FU1
125V 1.25A

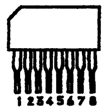

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
A
B
C
D
E
F
G
H
I
J
K
TO Y BOARD
Y-75
PL1
R
L
GND
CONT
GND
TP13
TP14
TP15
TP16
TP17
R39 4.7
R2 470
R6 100
C6 2.2/50V
C2 470p
R4 100k
C4 470p
R8 100k
C1 470p
R3 100p
C3 470p
R7 100p
R1 470
R5 100
C5 2.2/50V
IC1 M5218AL AUDIO AMP
(2/2)
(1/2)
R10 1.6k
R9 1.6k
IC2 M5218AL L+R
R12 47k
R11 47k
TP18
C7 2.2/50V
TP19
R18 100k
R14 100k
R13 6.2k
R15 100k
C8 0.015
C9 R018
IC3 M5218AL AUDIO AMP
R16 100k
R17 100k
C10 0.0056
C11 0.039
TP20
14 V
-14 V
IC4 STK4030-2-UL AUDIO AMP
C20 100/50V
R20 2.2k
C13 2.2/50V
R22 470
C12 0.0047
R21 56k
C14 100p
TP21
C15 100p
C17 1000p
C19 100p
C18 1/50V
R27 100
C21 100/50V
R26 56k
C22 10p
R25 100
R23 1.8k
C16 10/50V
R24 10k
C23 100 50V
C25 100 50V
R28 10(1/2W)
L1
TP22
C26 0.1
R29 10(1/2W)
RL1
TP23
TP
PL5
WOOFER(8Ω)
PL4
TO F2 BOARD
F2-5
PL2
TP29
CN1
TP27
TP28
C41 0.01
C44 0.01
RL2
D9
ERA15-02
T1
Q5 +14V REG
Q6 -14V REG
TP8
D4 S4VB20F
TP1
R35 4.7
Q5 2SC3243
TP11
R37 2.7k (1/2W)
29.7
15.2
C36 100 25V
C32 4700/42
C34 100/25V
D5
RD/5JS
C39 0.01
TP2
TP3
T2
TP10
D6 RD15JS
C35 100 25V
C37 100 25V
C33 470 42V
R38 2.7k (1/2W)
14.8
Q6 2SA1283
TP9
R36 4.7
-29.1
TP12
D7 ERA15-02
TP4
R34 100
TP5
D8 ERA15-02
C27 100 35V
TP7
TP6
D3 ERA15-02
RL1
R31 7.5k
D1 1SS176
R33 100k
D2 RD15JS
Q1-3 2SC2458
1.5
Q1-4 RELAY DRIVE
R30 10k
C29 470/6.3V
C30 470/6.3V
R32 5.6k
15.8
C31 10 50V
1.3
0.6
Q4 2SC3243
AUDIO AMP

6-4. SEMICONDUCTORS

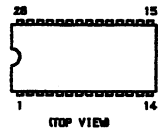
BU4066B


14
8
1
7
(TOP VIEW)

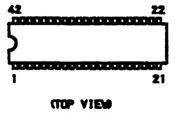
CX20061



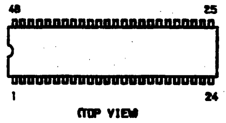
CXA1114P
CXA1228S


28
15
1
14
(TOP VIEW)

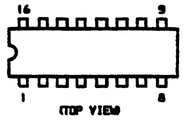
CXA1264AS


42
22
1
21
(TOP VIEW)

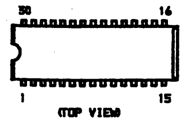
CXA1313S


48
25
1
24
(TOP VIEW)

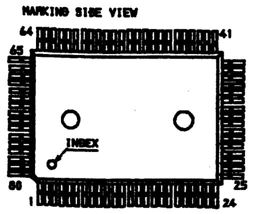
CXA1315P
CXA1526P
MB88201-638L
µPD4053BC


16
9
1
8
(TOP VIEW)

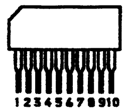
CXA1387S


30
16
1
15
(TOP VIEW)

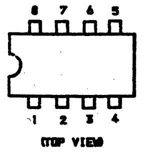
CXD1220AQ


MARKING SIDE VIEW
64
41
65
40
INDEX
80
1
24

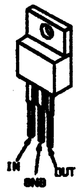
CXK1006L


12345678910

LM393P
RC4558P
µPX358C
µPC393C
µPC4558C


8 7 6 5
1 2 3 4
(TOP VIEW)

LM7805CT
M5F78M05L
RC7812FA
RC78M09FA
TA7805S
µPC7893HF



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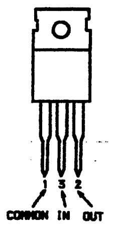
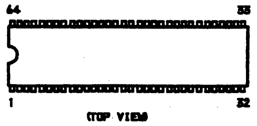
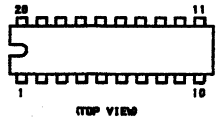

1 3 2
COMMON IN OUT

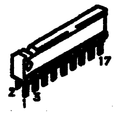
M37200M6-A16SP


64
33
1
32
(TOP VIEW)

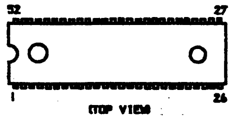
M52678P


20
11
1
10
(TOP VIEW)

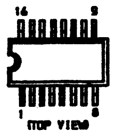
M5M4C500L-10



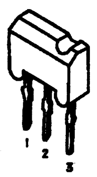
MB88733-137


52
27
1
26
(TOP VIEW)

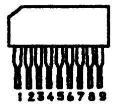
MC74HC4053F


16
9
1
8
(TOP VIEW)

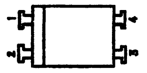
MN1280-S



NJM2233BS
NJM2245S



PC817-C



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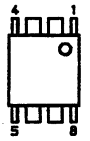
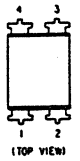
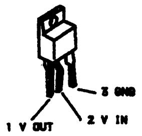


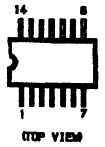
PS2501-1LB


4 3
1 2
(TOP VIEW)

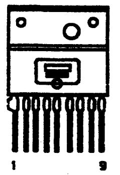
SE-135N
SE-135NS


3 GND
1 V OUT
2 V IN

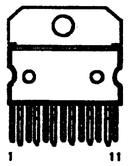
SN74HC04ANS


14
8
1
7
(TOP VIEW)

STR-S6301A



TDA2009A



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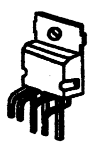

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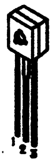

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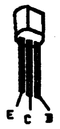

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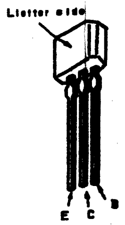
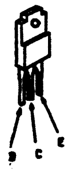
2SC2785-HFE
2SC3311A-QRS


Letter side
E C B

2SA1306A-Y
2SC3298B-Y



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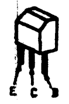
2SD774-34



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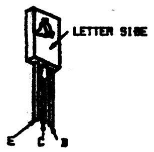
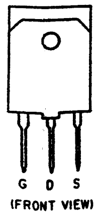
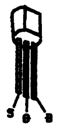
2SC2688-LK


LETTER SIDE
E C B

2SD1941-06


G D S
(FRONT VIEW)

2SK108-C



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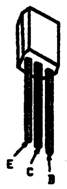

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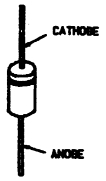
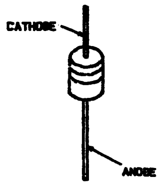
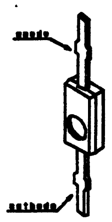
REP02-17


CATHODE
ANODE

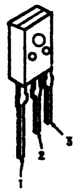
1SS119
1SV133
ERA83-006
RD10ES-B2
RD18ES-B1
RD30ES-B1
RD33ES-B2
RD3.6ES-B1
RD3.6ESL1
RD39ES-B4
RD4.7ES-B2
RD5.1ES-B1
RD5.1ES-B3
RD5.6ES-B2
RD5.6ES-B3
RD6.2ES-B2
RD6.8ES-B1
RD6.8ES-B2
RD8.2ES-B1
RD9.1ES-B2
WG713A


CATHODE
ANODE

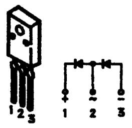
1T33


anode
cathode

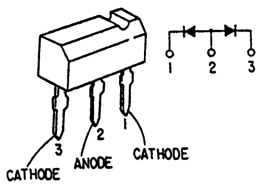
D5KC40H
DBLCA20



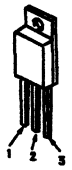
D5KD20H



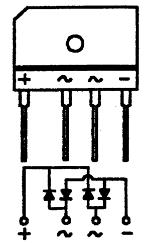
EGP20G


1 2 3
3
2
CATHODE
ANODE
CATHODE

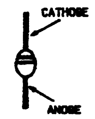
FMS-3FU



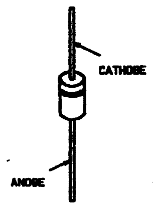
RBV-406H-01



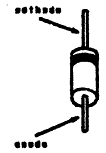
RG3G-5007L
U50G


CATHODE
ANODE

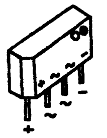
RK14
RU-1P
RU-3AM


CATHODE
ANODE

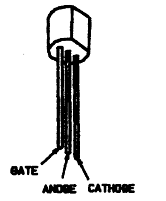
RU-4DS


cathode
anode

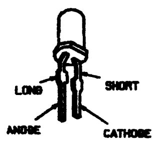
S1VB40



SHOR3D42


GATE
ANODE
CATHODE

TLR124


LONG
SHORT
ANODE
CATHODE

SECTION 7
EXPLODED VIEWS

NOTE:
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.

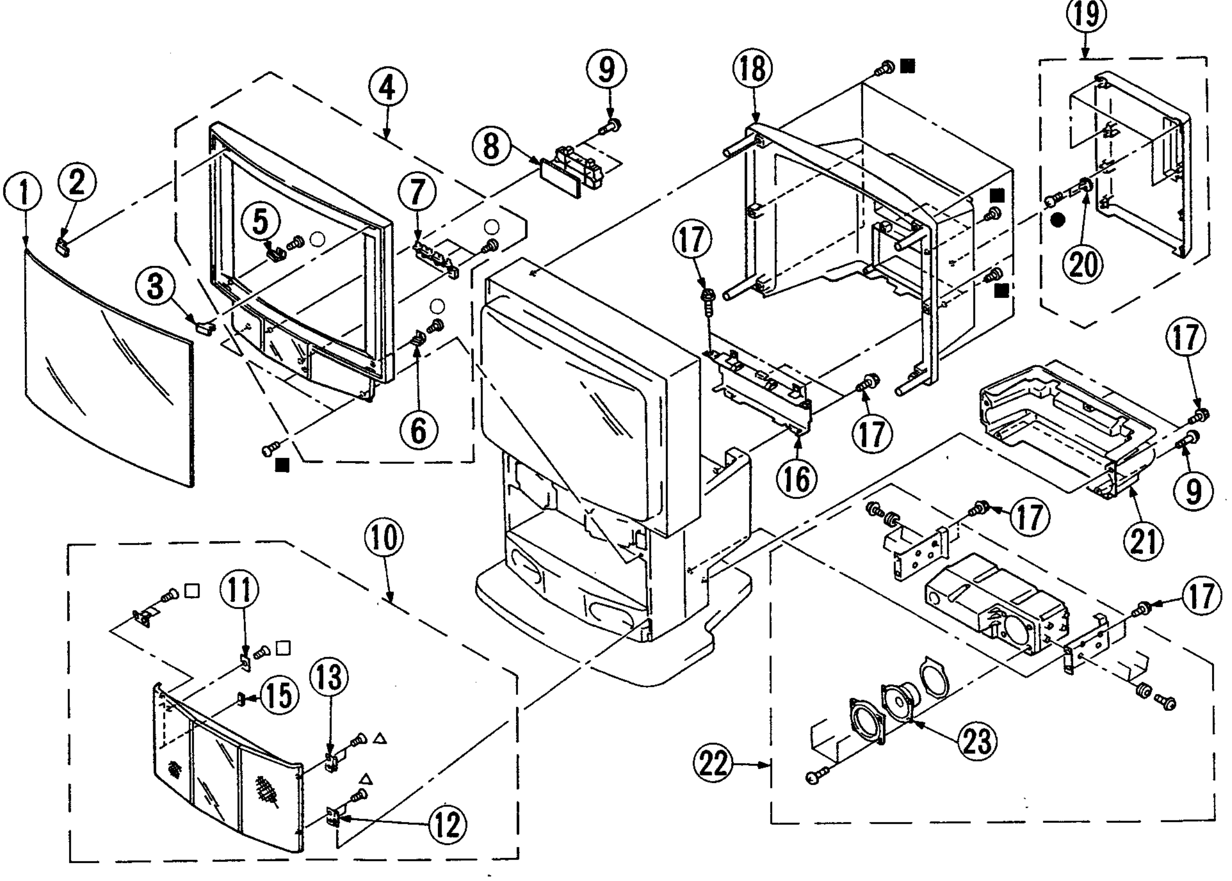
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une trame et par une marque ⚠ sont d'une importance critique pour la sécurité. Ne les remplacer que par des pièces de numéro spécifié.

7-1. COVER

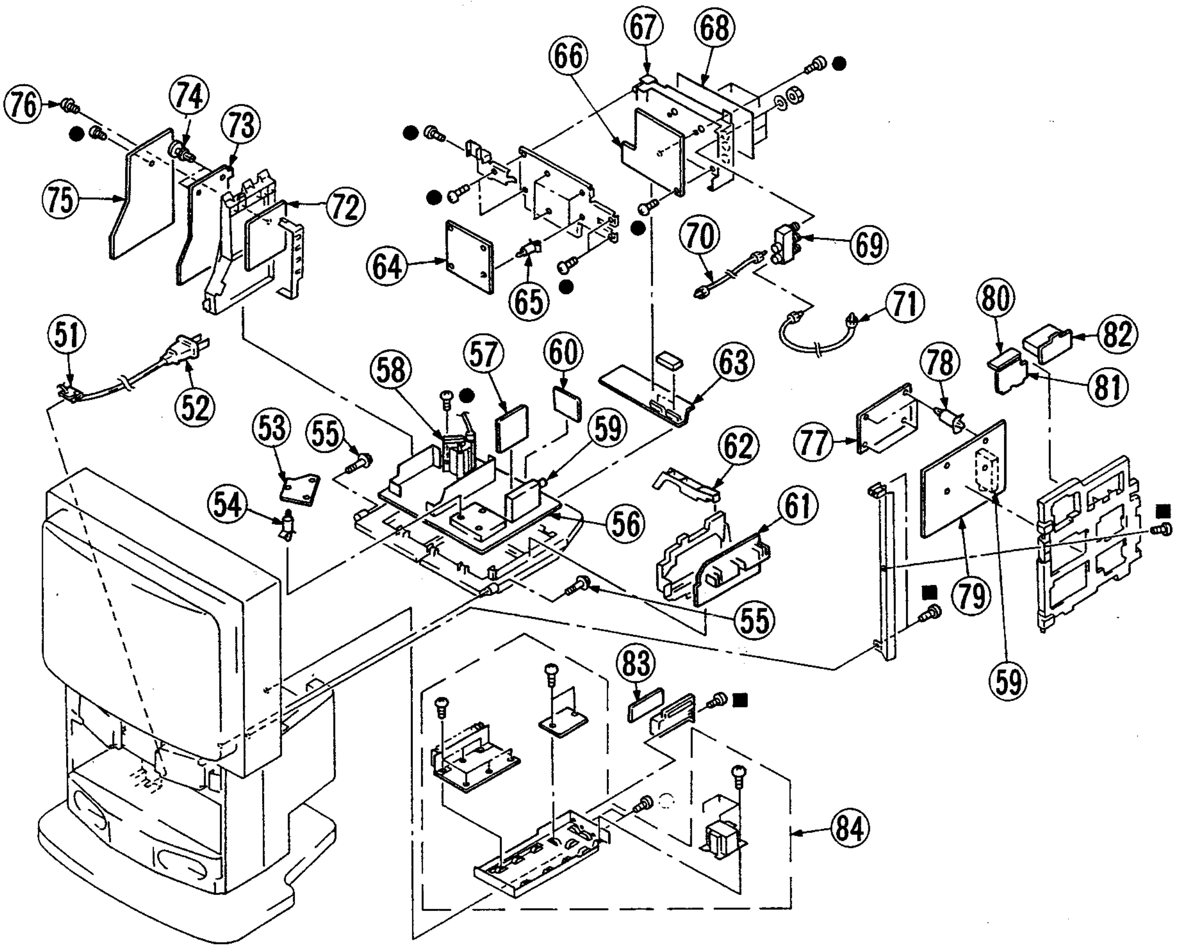
● : BVTP3×12 7-685-648-79
■ : BVTP4×16 7-685-663-79
○ : BVTP4×12 7-685-661-14
△ : K4.1×16 7-621-856-40
□ : K3.1×16 7-621-859-10



REF.NO.	PART NO.	DESCRIPTION	REMARK
1	4-032-192-01	FILTER, GLASS	
2	4-032-158-01	STOPPER (LEFT), FILTER	
3	4-032-159-01	STOPPER (RIGHT), FILTER	
4	X-4029-705-1	BEZEL ASSY	5-7
5	X-4029-698-1	HOLDER ASSY (LEFT), FILTER	
6	X-4029-699-1	HOLDER ASSY (RIGHT), FILTER	
7	X-4029-700-1	BUTTON ASSY, MULTI	
8	*1-638-780-11	H7 BOARD	
9	4-319-520-11	SCREW, SPECIAL (+PW4X30)	
10	X-4029-704-1	DOOR ASSY	11-15
11	4-032-137-01	CATCHER	
12	4-032-140-01	HINGE (C)	
13	4-032-141-01	HINGE (B)	
15	4-032-146-01	CUSHION	
16	*4-032-170-01	PLATE, BLIND	
17	4-378-522-01	SCREW, TAPPING, HEXAGON HEAD	
18	X-4029-709-1	COVER ASSY, REAR	
19	X-4029-701-1	COVER ASSY, TERMINAL	20
20	4-843-806-00	STRIKE	
21	*X-4029-901-1	PANEL ASSY, REAR	
22	1-544-547-11	SPEAKER BOX (12CM)	23
23	9-900-278-01	SPEAKER (WOOFER) 12CM	

7-2. CHASSIS

● : BVTP3×12 7-685-648-79
■ : BVTP4×16 7-685-663-79
○ : BVTP4×12 7-685-661-14



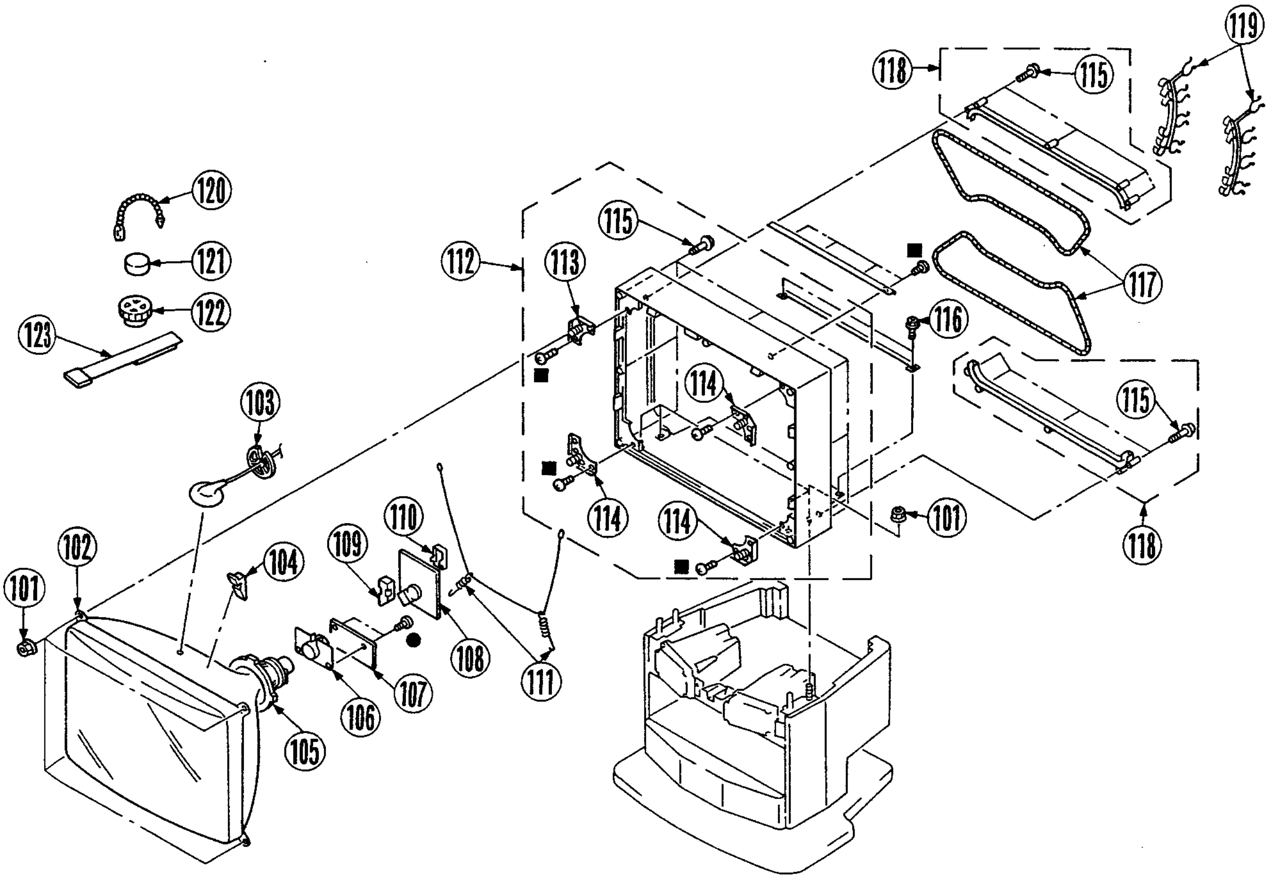
Les composants identifiés par une trame et par une marque ⚠ sont d'une importance critique pour la sécurité. Ne les remplacer que par des pièces de numéro spécifié.

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION	REMARK
51	⚠4-388-328-01	GROMMET, AC CORD	
52	⚠1-590-492-11	CORD, POWER (WITH CONNECTOR)	
53	*1-638-668-11	F1 BOARD	
54	*3-703-353-06	SUPPORT, PC BOARD	
55	4-319-520-11	SCREW, SPECIAL (+PW4X30)	
56	*A-1296-855-A	A BOARD, COMPLETE	57
57	*1-635-250-11	X1 BOARD	
58	⚠1-439-457-11	TRANSFORMER ASSY, FLYBACK	
59	⚠1-463-771-11	TUNER, FT (BTP-201A)	
60	*1-638-779-11	Y BOARD	
61	*A-1385-104-A	K BOARD, COMPLETE	
62	4-393-435-05	BRACKET, Y	
63	*A-1135-675-A	B BOARD, COMPLETE	
64	*A-1394-303-A	T BOARD, COMPLETE	
65	*3-703-353-04	SUPPORT, PC BOARD	
66	A-1394-281-A	U BOARD, COMPLETE	
67	4-393-419-01	TERMINAL BOARD, ANTENNA	
68	4-393-414-01	LABEL, ANTENNA	
69	⚠1-417-178-11	SELECTOR, ANTENNA (AS-2)	
70	*1-556-945-21	CABLE, P-P	
71	*1-557-056-31	CABLE, P-P	
72	*A-1345-983-A	D BOARD, COMPLETE	
73	*1-629-628-11	F0 BOARD	
74	3-531-576-31	RIVET (DIA. 3), NYLON	
75	*A-1245-526-A	F BOARD, COMPLETE	
76	4-388-477-01	SCREW(3X16),TAPPING,+BV WASHER	
77	*A-1347-039-A	V BOARD, COMPLETE	
78	*3-716-104-01	SUPPORT, PC	
79	*A-1195-042-A	P BOARD, COMPLETE	
80	*1-638-781-11	Y1 BOARD	
81	8-741-681-01	IC SBX1681-01	
82	*1-638-778-11	B1 BOARD	
83	*1-638-756-11	F2 BOARD	
84	9-900-614-01	AMPLIFIER BOARD (INCLUDING FUSE BOARD	

7-3. PICTURE TUBE

● : BVTP3×12 7-685-648-79
■ : BVTP4×16 7-685-663-79



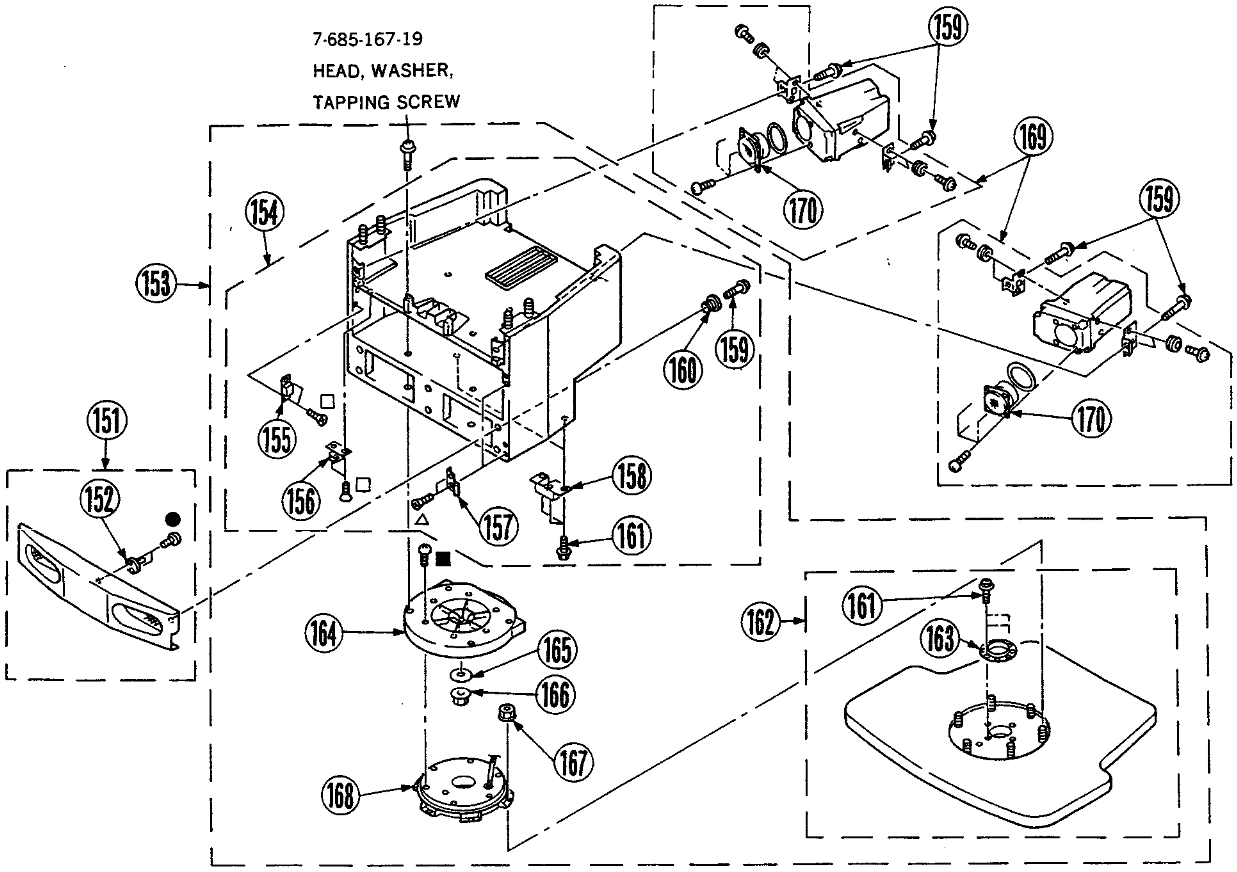
Les composants identifiés par une trame et par une marque ⚠ sont d'une importance critique pour la sécurité. Ne les remplacer que par des pièces de numéro spécifié.

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION	REMARK
101	4-387-204-01	NUT, SPECIAL, PICTURE TUBE	
102	⚠8-733-031-05	PICTURE TUBE (M74KNF10X)	
103	*3-704-372-01	HOLDER, HV CABLE	
104	3-704-495-01	SPACER, DY	
105	⚠1-451-372-11	DEFLECTION YOKE (Y31HGA)	
106	⚠1-452-579-11	NECK ASSY, PICTURE TUBE (NA322)	
107	*A-1371-733-A	W BOARD, COMPLETE	
108	*A-1331-146-A	C BOARD, COMPLETE	
109	*4-379-167-01	COVER (MAIN), CV	
110	*4-379-160-01	COVER (REAR LID), CV	
111	4-032-152-01	SPRING, TENSION	
112	X-4029-711-1	CABINET ASSY	113-115
113	*4-032-154-01	BRACKET (A), PICTURE TUBE	
114	*4-032-155-01	BRACKET (B), PICTURE TUBE	
115	4-319-520-11	SCREW, SPECIAL (+PW4X30)	
116	4-378-522-01	SCREW, TAPPING, HEXAGON HEAD	
117	⚠1-426-563-11	COIL, DEGAUSSING	
118	X-4029-702-1	HOLDER ASSY, DEGAUSSING COIL	115
119	*4-032-162-01	BAND, DEGAUSSING COIL	
120	4-308-870-00	CLIP, LEAD WIRE	
121	1-452-032-00	MAGNET, DISK; 10MM ϕ	
122	1-452-094-00	MAGNET, ROTATABLE DISK; 15MM ϕ	
123	X-4306-312-0	PERMALLOY ASSY, CONVERGENCE	

7-4. RACK

● : BVTP3×12 7-685-648-79
■ : BVTP4×16 7-685-663-79
△ : K4.1×16 7-621-856-40
□ : K3.1×16 7-621-859-10


7-685-167-19
HEAD, WASHER,
TAPPING SCREW
159
169
159
170
154
153
160
159
170
151
155
152
156
157
158
161
●
■
△
□
164
165
166
167
168
162
161
163

REF.NO.	PART NO.	DESCRIPTION	REMARK
151	*X-4029-707-1	PANEL ASSY, FRONT	152
152	4-843-806-00	STRIKE	
153	*A-1500-143-A	RACK COMPLETE ASSY	154-168
154	*X-4029-706-1	RACK ASSY	155-161
155	4-032-136-01	CATCHER, MAGNET	
156	4-032-138-01	CATCHER, LEVEL	
157	4-032-139-01	HINGE (A)	
158	4-032-163-01	BRACKET, PANEL	
159	4-319-520-11	SCREW, SPECIAL (+PW4X30)	
160	*4-349-110-00	HOLDER, SCREW	
161	*3-703-805-41	SCREW, TAPPING	
162	*X-4029-703-1	BASE ASSY	161,163
163	4-032-160-01	BUSHING	
164	*4-032-188-01	BASE	
165	4-032-145-01	SPACER	
166	4-032-149-01	NUT, FLANGE NYLON	
167	4-304-749-00	NUT, FLANGE	
168	1-550-689-11	SWIVEL, AUTO	
169	1-544-546-11	SPEAKER BOX (8.7CM)	170
170	9-900-277-01	SPEAKER (MAIN) 8.7CM	

SECTION 8
ELECTRICAL PARTS LIST

NOTE:

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

RESISTORS

- All resistors are in ohms
- F : nonflammable

When indicating parts by reference number, please include the board name.

CAPACITORS

- MF : μF, PF : μμF

COILS

- MMH : mH, UH : μH

- The components identified by ⋈ in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une trame et par une marque ⚠ sont d'une importance critique pour la sécurité. Ne les remplacer que par des pièces de numéro spécifié.

REF.NO.	PART NO.	DESCRIPTION				REMARK
	*1-638-778-11	B1 BOARD				
		********				
		<CONNECTOR>				
B1-71	*1-564-506-11	PLUG, CONNECTOR 3P				
B1-74	*1-560-124-00	PLUG, CONNECTOR (2.5MM PITCH)				
		<CAPACITOR>				
C1390	1-124-903-11	ELECT	1MF	20%	50V	
C1391	1-102-074-00	CERAMIC	0.001MF	10%	50V	
C1392	1-124-903-11	ELECT	1MF	20%	50V	
C1393	1-102-074-00	CERAMIC	0.001MF	10%	50V	
		<IC>				
DC1390	8-741-653-01	IC SBX1653-01				
IC1390	8-759-929-62	IC LM7812CT				
IC1391	8-759-924-12	IC LM7805CT				
		<RESISTOR>				
R1390	1-216-446-00	METAL OXIDE	18	5%	2W	F
R1391	1-216-378-11	METAL OXIDE	5.6	5%	2W	F
**						
	*A-1135-675-A	B BOARD, COMPLETE				
		*****************				
		<CONNECTOR>				
B2	*1-564-507-11	PLUG, CONNECTOR 4P				
B5	*1-568-376-11	CONNECTOR,HINGE (RECEPTACLE)7P				
B24	*1-568-371-11	PIN, CONNECTOR (PC BOARD) 15P				
B26	*1-568-371-11	PIN, CONNECTOR (PC BOARD) 15P				
B29	1-566-942-11	CONNECTOR,HINGE(RECEPTACLE)30P				
B51	*1-564-506-11	PLUG, CONNECTOR 3P				
B52	*1-564-505-11	PLUG, CONNECTOR 2P				
B53	*1-564-508-11	PLUG, CONNECTOR 5P				
B73	*1-564-509-11	PLUG, CONNECTOR 6P				
B74	*1-560-124-00	PLUG, CONNECTOR (2.5MM PITCH)				
		<CAPACITOR>				
C1301	1-130-728-00	FILM	0.0022MF	5%	50V	
C1302	1-124-119-00	ELECT	330MF	20%	16V	
C1303	1-126-233-11	ELECT	22MF	20%	25V	
C1304	1-126-233-11	ELECT	22MF	20%	25V	
C1305	1-126-233-11	ELECT	22MF	20%	25V	
C1306	1-164-035-11	CERAMIC	47PF	5%	50V	
C1307	1-124-477-11	ELECT	47MF	20%	16V	
C1308	1-124-893-11	ELECT	2200MF	20%	10V	
C1309	1-102-121-00	CERAMIC	0.0022MF	10%	50V	
C1310	1-124-907-11	ELECT	10MF	20%	50V	
C1316	1-124-589-11	ELECT	47MF	20%	16V	
C1317	1-124-477-11	ELECT	47MF	20%	16V	
C1319	1-124-477-11	ELECT	47MF	20%	16V	
C1321	1-124-477-11	ELECT	47MF	20%	16V	
C1325	1-124-477-11	ELECT	47MF	20%	16V	
C1326	1-136-161-00	FILM	0.047MF	5%	50V	
C1327	1-124-477-11	ELECT	47MF	20%	16V	
C1342	1-164-066-11	CERAMIC	68PF	5%	50V	
C1343	1-124-907-11	ELECT	10MF	20%	50V	
C1344	1-126-233-11	ELECT	22MF	20%	25V	
C1345	1-126-233-11	ELECT	22MF	20%	25V	
C1346	1-126-233-11	ELECT	22MF	20%	25V	
C1347	1-124-477-11	ELECT	47MF	20%	16V	
C1349	1-124-477-11	ELECT	47MF	20%	16V	
		<DIODE>				
D1301	8-719-911-19	DIODE 1SS119				
D1302	8-719-911-19	DIODE 1SS119				
D1303	8-719-109-97	DIODE RD6.8ES-B2				
D1304	8-719-109-97	DIODE RD6.8ES-B2				
D1305	8-719-109-97	DIODE RD6.8ES-B2				
D1306	8-719-911-19	DIODE 1SS119				
		<DELAY LINE>				
DL1300	1-415-831-11	DELAY LINE				
		<IC>				
IC1301	8-759-972-43	IC PCD8582				
IC1302	8-752-037-15	IC CXA1387S				
IC1303	8-752-035-53	IC CXA1315P				
IC1304	8-759-710-69	IC NJM2233BS				
IC1305	8-759-710-69	IC NJM2233BS				
		<COIL>				
L1301	1-410-668-11	INDUCTOR	27UH			
L1302	1-410-663-31	INDUCTOR	10UH			
		<TRANSISTOR>				
Q1301	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q1302	8-729-423-44	TRANSISTOR 2SA1309A-QRS				
Q1303	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q1304	8-729-423-37	TRANSISTOR 2SC3311A-QRS				
Q1305	8-729-423-37	TRANSISTOR 2SC3311A-QRS				

B **P**

REF.NO.	PART NO.	DESCRIPTION				REMARK
Q1308	8-729-423-37	TRANSISTOR 2SC3311A-QRS				
Q1309	8-729-423-37	TRANSISTOR 2SC3311A-QRS				
Q1311	8-729-423-37	TRANSISTOR 2SC3311A-QRS				
Q1312	8-729-423-37	TRANSISTOR 2SC3311A-QRS				
Q1313	8-729-423-37	TRANSISTOR 2SC3311A-QRS				

<RESISTOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
R1301	1-249-429-11	CARBON	10K	5%	1/4W	
R1302	1-249-409-11	CARBON	220	5%	1/4W	
R1303	1-249-409-11	CARBON	220	5%	1/4W	
R1304	1-249-429-11	CARBON	10K	5%	1/4W	
R1305	1-249-429-11	CARBON	10K	5%	1/4W	
R1306	1-249-441-11	CARBON	100K	5%	1/4W	
R1307	1-249-429-11	CARBON	10K	5%	1/4W	
R1308	1-249-417-11	CARBON	1K	5%	1/4W	
R1309	1-249-425-11	CARBON	4.7K	5%	1/4W	
R1310	1-249-428-11	CARBON	8.2K	5%	1/4W	
R1311	1-249-409-11	CARBON	220	5%	1/4W	
R1312	1-249-409-11	CARBON	220	5%	1/4W	
R1313	1-249-417-11	CARBON	1K	5%	1/4W	
R1314	1-249-417-11	CARBON	1K	5%	1/4W	
R1315	1-249-425-11	CARBON	4.7K	5%	1/4W	
R1317	1-249-426-11	CARBON	5.6K	5%	1/4W	
R1320	1-249-405-11	CARBON	100	5%	1/4W	
R1321	1-249-405-11	CARBON	100	5%	1/4W	
R1322	1-249-405-11	CARBON	100	5%	1/4W	
R1323	1-249-405-11	CARBON	100	5%	1/4W	
R1324	1-249-405-11	CARBON	100	5%	1/4W	
R1325	1-249-405-11	CARBON	100	5%	1/4W	
R1326	1-249-433-11	CARBON	22K	5%	1/4W	
R1327	1-249-417-11	CARBON	1K	5%	1/4W	
R1328	1-249-405-11	CARBON	100	5%	1/4W	
R1329	1-249-405-11	CARBON	100	5%	1/4W	
R1330	1-249-405-11	CARBON	100	5%	1/4W	
R1331	1-249-417-11	CARBON	1K	5%	1/4W	
R1332	1-249-429-11	CARBON	10K	5%	1/4W	
R1333	1-249-434-11	CARBON	27K	5%	1/4W	
R1334	1-249-418-11	CARBON	1.2K	5%	1/4W	
R1335	1-249-423-11	CARBON	3.3K	5%	1/4W	
R1336	1-249-424-11	CARBON	3.9K	5%	1/4W	
R1337	1-249-428-11	CARBON	8.2K	5%	1/4W	
R1338	1-249-424-11	CARBON	3.9K	5%	1/4W	
R1339	1-249-421-11	CARBON	2.2K	5%	1/4W	
R1340	1-249-417-11	CARBON	1K	5%	1/4W	
R1341	1-249-413-11	CARBON	470	5%	1/4W	
R1342	1-249-435-11	CARBON	33K	5%	1/4W	
R1343	1-249-433-11	CARBON	22K	5%	1/4W	
R1344	1-249-417-11	CARBON	1K	5%	1/4W	
R1345	1-249-424-11	CARBON	3.9K	5%	1/4W	
R1346	1-249-424-11	CARBON	3.9K	5%	1/4W	
R1348	1-249-434-11	CARBON	27K	5%	1/4W	
R1349	1-249-424-11	CARBON	3.9K	5%	1/4W	
R1350	1-249-419-11	CARBON	1.5K	5%	1/4W	
R1351	1-249-409-11	CARBON	220	5%	1/4W	
R1352	1-249-411-11	CARBON	330	5%	1/4W	
R1353	1-249-405-11	CARBON	100	5%	1/4W	
R1354	1-249-417-11	CARBON	1K	5%	1/4W	
R1355	1-249-417-11	CARBON	1K	5%	1/4W	
R1356	1-249-405-11	CARBON	100	5%	1/4W	
R1357	1-249-418-11	CARBON	1.2K	5%	1/4W	
R1358	1-249-417-11	CARBON	1K	5%	1/4W	
R1359	1-249-429-11	CARBON	10K	5%	1/4W	
R1362	1-249-427-11	CARBON	6.8K	5%	1/4W	
R1370	1-249-426-11	CARBON	5.6K	5%	1/4W	
R1371	1-249-426-11	CARBON	5.6K	5%	1/4W	
R1372	1-249-423-11	CARBON	3.3K	5%	1/4W	
R1373	1-249-424-11	CARBON	3.9K	5%	1/4W	
R1374	1-249-405-11	CARBON	100	5%	1/4W	

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*A-1195-042-A P BOARD, COMPLETE
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*4-334-952-00 CASE (C), SHIELD
*4-341-751-01 EYELET (EY1,EY2)

<CAPACITOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
C3101	1-124-907-11	ELECT	10MF	20%	50V	
C3102	1-124-907-11	ELECT	10MF	20%	50V	
C3103	1-124-907-11	ELECT	10MF	20%	50V	
C3104	1-136-157-00	FILM	0.022MF	5%	50V	
C3105	1-126-233-11	ELECT	22MF	20%	25V	
C3106	1-126-233-11	ELECT	22MF	20%	25V	
C3201	1-124-907-11	ELECT	10MF	20%	50V	
C3202	1-124-907-11	ELECT	10MF	20%	50V	
C3203	1-124-119-00	ELECT	330MF	20%	16V	
C3204	1-124-478-11	ELECT	100MF	20%	25V	
C3205	1-124-119-00	ELECT	330MF	20%	16V	
C3206	1-124-472-11	ELECT	470MF	20%	10V	
C3207	1-126-233-11	ELECT	22MF	20%	50V	
C3208	1-124-478-11	ELECT	100MF	20%	25V	
C3209	1-102-121-00	CERAMIC	0.0022MF	10%	50V	
C3210	1-101-003-00	CERAMIC	0.0047MF		50V	
C3211	1-101-003-00	CERAMIC	0.0047MF		50V	
C3212	1-164-048-11	CERAMIC	12PF	5%	50V	
C3213	1-124-903-11	ELECT	1MF	20%	50V	
C3214	1-164-054-11	CERAMIC	22PF	5%	50V	
C3215	1-164-056-11	CERAMIC	27PF	5%	50V	
C3216	1-164-060-11	CERAMIC	39PF	5%	50V	
C3217	1-126-103-11	ELECT	470MF	20%	16V	
C3218	1-101-004-00	CERAMIC	0.01MF		50V	
C3219	1-101-002-00	CERAMIC	0.0022MF		50V	
C3220	1-164-070-11	CERAMIC	100PF	5%	50V	
C3221	1-164-062-11	CERAMIC	47PF	5%	50V	
C3222	1-164-062-11	CERAMIC	47PF	5%	50V	
C3223	1-124-477-11	ELECT	47MF	20%	16V	
C3224	1-124-478-11	ELECT	100MF	20%	25V	
C3225	1-124-478-11	ELECT	100MF	20%	25V	
C3226	1-124-902-00	ELECT	0.47MF	20%	50V	
C3227	1-124-477-11	ELECT	47MF	20%	16V	
C3228	1-124-927-11	ELECT	4.7MF	20%	50V	
C3230	1-164-072-11	CERAMIC	120PF	5%	50V	
C3231	1-102-978-00	CERAMIC	220PF	5%	50V	
C3232	1-102-114-00	CERAMIC	470PF	10%	50V	
C3235	1-126-101-11	ELECT	100MF	20%	16V	
C3801	1-124-477-11	ELECT	47MF	20%	16V	
C3802	1-124-477-11	ELECT	47MF	20%	16V	
C3803	1-124-477-11	ELECT	47MF	20%	16V	
C3804	1-124-477-11	ELECT	47MF	20%	16V	
C3805	1-164-068-11	CERAMIC	82PF	5%	50V	
C3806	1-102-976-00	CERAMIC	180PF	5%	50V	
C3807	1-136-163-00	FILM	0.068MF	5%	50V	
C3808	1-164-072-11	CERAMIC	120PF	5%	50V	
C3809	1-164-056-11	CERAMIC	27PF	5%	50V	
C3810	1-164-058-11	CERAMIC	33PF	5%	50V	
C3811	1-124-907-11	ELECT	10MF	20%	50V	

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une trame et par une marque ⚠ sont d'une importance critique pour la sécurité. Ne les remplacer que par des pièces de numéro spécifié.

REF.NO.	PART NO.	DESCRIPTION			REMARK
C3812	1-136-163-00	FILM	0.068MF	5%	50V
C3813	1-136-169-00	FILM	0.22MF	5%	50V
C3814	1-101-004-00	CERAMIC	0.01MF		50V
C3815	1-101-004-00	CERAMIC	0.01MF		50V
C3816	1-164-068-11	CERAMIC	82PF	5%	50V
C3817	1-164-066-11	CERAMIC	68PF	5%	50V
C3818	1-102-108-00	CERAMIC	150PF	10%	50V
C3819	1-164-068-11	CERAMIC	82PF	5%	50V
C3820	1-124-477-11	ELECT	47MF	20%	16V
C3821	1-101-004-00	CERAMIC	0.01MF		50V
C3822	1-164-048-11	CERAMIC	12PF	5%	50V
C3823	1-164-054-11	CERAMIC	22PF	5%	50V
C3824	1-124-903-11	ELECT	1MF	20%	50V
C3825	1-136-153-00	FILM	0.01MF	5%	50V
C3826	1-101-004-00	CERAMIC	0.01MF		50V
C3827	1-124-907-11	ELECT	10MF	20%	50V
C3828	1-164-048-11	CERAMIC	12PF	5%	50V
C3829	1-101-001-00	CERAMIC	0.001MF		50V
C3830	1-136-172-00	FILM	0.39MF	5%	50V
C3831	1-136-172-00	FILM	0.39MF	5%	50V
C3832	1-136-172-00	FILM	0.39MF	5%	50V
C3833	1-164-048-11	CERAMIC	12PF	5%	50V
C3849	1-164-064-11	CERAMIC	56PF	5%	50V
C3850	1-102-114-00	CERAMIC	470PF	10%	50V
C3851	1-136-159-00	FILM	0.033MF	5%	50V
C3852	1-124-477-11	ELECT	47MF	20%	16V
C3853	1-124-907-11	ELECT	10MF	20%	50V
C3854	1-136-169-00	FILM	0.22MF	5%	50V
C3855	1-136-161-00	FILM	0.047MF	5%	50V
C3856	1-124-907-11	ELECT	10MF	20%	50V
C3857	1-136-165-00	FILM	0.1MF	5%	50V
C3858	1-124-903-11	ELECT	1MF	20%	50V
C3862	1-130-475-00	MYLAR	0.0022MF	5%	50V
C3863	1-164-072-11	CERAMIC	120PF	5%	50V
C3864	1-124-903-11	ELECT	1MF	20%	50V
C3865	1-164-068-11	CERAMIC	82PF	5%	50V
C3866	1-124-907-11	ELECT	10MF	20%	50V
C3867	1-124-907-11	ELECT	10MF	20%	50V
C3872	1-124-902-00	ELECT	0.47MF	20%	50V
C3873	1-136-161-00	FILM	0.047MF	5%	50V
C3874	1-124-907-11	ELECT	10MF	20%	50V
C3875	1-101-004-00	CERAMIC	0.01MF		50V
C3876	1-164-070-11	CERAMIC	100PF	5%	50V
		<NETWORK>			
CP3201	1-236-493-11	NETWORK, RES, THICK FILM			
CP3202	1-236-490-11	NETWORK, RES, THICK FILM			
		<TRIMMER>			
CV3801	1-141-181-11	CAP,TRIMMER			
		<DIODE>			
D3201	8-719-110-78	DIODE RD33ES-B2			
D3203	8-719-200-02	DIODE 10E2			
D3205	8-719-119-97	DIODE RD3.6ES-L1			
D3207	8-719-911-19	DIODE 1SS119			
		<DELAY LINE>			
DL3801	1-415-240-00	DELAY LINE			

REF.NO.	PART NO.	DESCRIPTION		REMARK
		<IC>		
IC3201	⚠8-759-142-04	IC UPC7893HF		
IC3202	8-759-512-50	IC MB88733-137		
IC3203	⚠8-759-924-12	IC LM7805CT		
IC3204	8-759-803-25	IC CXK1006L		
IC3205	8-759-140-53	IC UPD4053BC		
IC3801	8-752-006-12	IC CX20061		
IC3802	8-752-006-12	IC CX20061		
IC3803	8-752-033-32	IC CXA1228S		
IC3805	8-752-035-53	IC CXA1315P		
		<IF BLOCK>		
IF3201	⚠1-464-755-21	IF BLOCK (IFB-450A)		
		<COIL>		
L3201	1-408-408-00	INDUCTOR	8.2UH	
L3202	1-408-421-00	INDUCTOR	100UH	
L3203	1-408-413-00	INDUCTOR	22UH	
L3204	1-408-409-00	INDUCTOR	10UH	
L3801	1-408-415-00	INDUCTOR	33UH	
L3802	1-408-412-00	INDUCTOR	18UH	
L3803	1-408-421-00	INDUCTOR	100UH	
L3804	1-408-421-00	INDUCTOR	100UH	
L3805	1-408-409-00	INDUCTOR	10UH	
L3806	1-408-421-00	INDUCTOR	100UH	
L3807	1-408-424-00	INDUCTOR	180UH	
L3808	1-408-424-00	INDUCTOR	180UH	
L3810	1-408-409-00	INDUCTOR	10UH	
L3811	1-408-409-00	INDUCTOR	10UH	
		<CONNECTOR>		
P1	*1-566-057-11	PIN, CONNECTOR 5P		
P2	*1-566-061-11	PIN, CONNECTOR 9P		
P3	*1-566-060-11	PIN, CONNECTOR 8P		
P4	*1-564-511-11	PLUG, CONNECTOR 8P		
P6	*1-560-125-00	PLUG, CONNECTOR (2.5MM PITCH)		
P14	*1-564-511-11	PLUG, CONNECTOR 8P		
P31	*1-564-509-11	PLUG, CONNECTOR 6P		
P32	*1-564-508-11	PLUG, CONNECTOR 5P		
P63/0	*1-564-507-11	PLUG, CONNECTOR 4P		
P63/1	*1-564-507-11	PLUG, CONNECTOR 4P		
P71	*1-564-506-11	PLUG, CONNECTOR 3P		
P72	*1-564-513-11	PLUG, CONNECTOR 10P		
P73	*1-564-509-11	PLUG, CONNECTOR 6P		
		<TRANSISTOR>		
Q3101	8-729-423-37	TRANSISTOR 2SC3311A-QRS		
Q3102	8-729-423-37	TRANSISTOR 2SC3311A-QRS		
Q3103	8-729-423-37	TRANSISTOR 2SC3311A-QRS		
Q3201	8-729-423-37	TRANSISTOR 2SC3311A-QRS		
Q3202	8-729-423-37	TRANSISTOR 2SC3311A-QRS		
Q3203	8-729-423-44	TRANSISTOR 2SA1309A-QRS		
Q3204	8-729-423-37	TRANSISTOR 2SC3311A-QRS		
Q3205	8-729-423-37	TRANSISTOR 2SC3311A-QRS		
Q3206	8-729-423-44	TRANSISTOR 2SA1309A-QRS		
Q3207	8-729-423-44	TRANSISTOR 2SA1309A-QRS		
Q3208	8-729-423-37	TRANSISTOR 2SC3311A-QRS		
Q3209	8-729-423-37	TRANSISTOR 2SC3311A-QRS		
Q3801	8-729-423-37	TRANSISTOR 2SC3311A-QRS		

KV-29XBR85
RM-Y108

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Les composants identifiés par une trame et par une marque ⚠ sont d'une importance critique pour la sécurité. Ne les remplacer que par des pièces de numéro spécifié.

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION				REMARK
Q3802	8-729-423-44	TRANSISTOR 2SA1309A-QRS				
Q3803	8-729-423-44	TRANSISTOR 2SA1309A-QRS				
Q3804	8-729-423-44	TRANSISTOR 2SA1309A-QRS				
Q3805	8-729-423-44	TRANSISTOR 2SA1309A-QRS				
Q3806	8-729-423-37	TRANSISTOR 2SC3311A-QRS				
Q3807	8-729-423-37	TRANSISTOR 2SC3311A-QRS				
Q3808	8-729-423-37	TRANSISTOR 2SC3311A-QRS				
Q3809	8-729-423-37	TRANSISTOR 2SC3311A-QRS				
Q3810	8-729-423-37	TRANSISTOR 2SC3311A-QRS				
Q3811	8-729-423-37	TRANSISTOR 2SC3311A-QRS				
Q3812	8-729-900-89	TRANSISTOR DTC144ES				
Q3813	8-729-423-37	TRANSISTOR 2SC3311A-QRS				
Q3814	8-729-423-44	TRANSISTOR 2SA1309A-QRS				
Q3815	8-729-423-44	TRANSISTOR 2SA1309A-QRS				
Q3816	8-729-423-37	TRANSISTOR 2SC3311A-QRS				
Q3817	8-729-423-37	TRANSISTOR 2SC3311A-QRS				
Q3818	8-729-423-37	TRANSISTOR 2SC3311A-QRS				
Q3819	8-729-423-37	TRANSISTOR 2SC3311A-QRS				
Q3820	8-729-423-37	TRANSISTOR 2SC3311A-QRS				
Q3821	8-729-423-37	TRANSISTOR 2SC3311A-QRS				
Q3822	8-729-423-44	TRANSISTOR 2SA1309A-QRS				
Q3823	8-729-423-44	TRANSISTOR 2SA1309A-QRS				
Q3824	8-729-423-37	TRANSISTOR 2SC3311A-QRS				
Q3825	8-729-423-44	TRANSISTOR 2SA1309A-QRS				
Q3826	8-729-423-37	TRANSISTOR 2SC3311A-QRS				
Q3827	8-729-600-12	TRANSISTOR 2SK108-C				
Q3828	8-729-423-44	TRANSISTOR 2SA1309A-QRS				
Q3829	8-729-423-44	TRANSISTOR 2SA1309A-QRS				
		<RESISTOR>				
R3101	1-249-405-11	CARBON	100	5%	1/4W	
R3102	1-249-405-11	CARBON	100	5%	1/4W	
R3103	1-249-405-11	CARBON	100	5%	1/4W	
R3104	1-249-441-11	CARBON	100K	5%	1/4W	
R3105	1-249-405-11	CARBON	100	5%	1/4W	
R3106	1-249-441-11	CARBON	100K	5%	1/4W	
R3107	1-247-895-00	CARBON	470K	5%	1/4W	
R3108	1-249-441-11	CARBON	100K	5%	1/4W	
R3109	1-249-425-11	CARBON	4.7K	5%	1/4W	
R3110	1-249-405-11	CARBON	100	5%	1/4W	
R3111	1-249-425-11	CARBON	4.7K	5%	1/4W	
R3112	1-249-405-11	CARBON	100	5%	1/4W	
R3113	1-249-405-11	CARBON	100	5%	1/4W	
R3114	1-249-441-11	CARBON	100K	5%	1/4W	
R3115	1-249-425-11	CARBON	4.7K	5%	1/4W	
R3116	1-249-441-11	CARBON	100K	5%	1/4W	
R3117	1-249-441-11	CARBON	100K	5%	1/4W	
R3118	1-249-441-11	CARBON	100K	5%	1/4W	
R3119	1-247-895-00	CARBON	470K	5%	1/4W	
R3120	1-249-405-11	CARBON	100	5%	1/4W	
R3121	1-249-423-11	CARBON	3.3K	5%	1/4W	
R3122	1-249-432-11	CARBON	18K	5%	1/4W	
R3123	1-249-405-11	CARBON	100	5%	1/4W	
R3124	1-249-405-11	CARBON	100	5%	1/4W	
R3200	1-249-416-11	CARBON	820	5%	1/4W	
R3201	1-249-417-11	CARBON	1K	5%	1/4W	
R3202	⚠1-215-884-91	METAL OXIDE	[illegible]	5%	2W	F
R3203	1-249-426-11	CARBON	5.6K	5%	1/4W	
R3204	⚠1-215-884-91	METAL OXIDE	47	5%	2W	F
R3206	1-215-458-00	METAL	36K	1%	1/4W	
R3207	1-249-433-11	CARBON	22K	5%	1/4W	
R3208	1-249-433-11	CARBON	22K	5%	1/4W	
R3209	1-249-419-11	CARBON	1.5K	5%	1/4W	
R3211	1-249-411-11	CARBON	330	5%	1/4W	
R3212	1-249-409-11	CARBON	220	5%	1/4W	
R3213	1-249-409-11	CARBON	220	5%	1/4W	
R3214	1-249-417-11	CARBON	1K	5%	1/4W	
R3215	1-249-421-11	CARBON	2.2K	5%	1/4W	
R3216	1-249-420-11	CARBON	1.8K	5%	1/4W	
R3217	⚠1-215-896-00	METAL OXIDE	4.7K	5%	2W	F
R3218	1-249-417-11	CARBON	1K	5%	1/4W	
R3219	1-249-429-11	CARBON	10K	5%	1/4W	
R3220	1-249-429-11	CARBON	10K	5%	1/4W	
R3221	1-249-440-11	CARBON	82K	5%	1/4W	
R3222	1-247-891-00	CARBON	330K	5%	1/4W	
R3223	1-249-429-11	CARBON	10K	5%	1/4W	
R3224	1-249-417-11	CARBON	1K	5%	1/4W	
R3225	1-249-417-11	CARBON	1K	5%	1/4W	
R3226	1-249-417-11	CARBON	1K	5%	1/4W	
R3227	1-249-409-11	CARBON	220	5%	1/4W	
R3228	1-249-421-11	CARBON	2.2K	5%	1/4W	
R3229	1-249-409-11	CARBON	220	5%	1/4W	
R3230	1-249-409-11	CARBON	220	5%	1/4W	
R3231	1-249-429-11	CARBON	10K	5%	1/4W	
R3232	1-249-421-11	CARBON	2.2K	5%	1/4W	
R3233	1-249-421-11	CARBON	2.2K	5%	1/4W	
R3234	1-249-421-11	CARBON	2.2K	5%	1/4W	
R3235	1-249-421-11	CARBON	2.2K	5%	1/4W	
R3236	1-249-429-11	CARBON	10K	5%	1/4W	
R3237	1-249-417-11	CARBON	1K	5%	1/4W	
R3238	1-249-429-11	CARBON	10K	5%	1/4W	
R3239	⚠1-216-446-91	METAL OXIDE	[illegible]	5%	2W	F
R3240	⚠1-216-446-91	METAL OXIDE	18	5%	2W	F
R3241	⚠1-216-447-91	METAL OXIDE	22	5%	2W	F
R3242	1-249-429-11	CARBON	10K	5%	1/4W	
R3243	1-249-425-11	CARBON	4.7K	5%	1/4W	
R3244	1-249-421-11	CARBON	2.2K	5%	1/4W	
R3245	1-249-425-11	CARBON	4.7K	5%	1/4W	
R3246	1-249-433-11	CARBON	22K	5%	1/4W	
R3247	1-249-414-11	CARBON	560	5%	1/4W	
R3248	1-249-416-11	CARBON	820	5%	1/4W	
R3249	1-249-393-11	CARBON	10	5%	1/4W	
R3251	1-249-417-11	CARBON	1K	5%	1/4W	
R3253	1-249-417-11	CARBON	1K	5%	1/4W	
R3254	1-249-424-11	CARBON	3.9K	5%	1/4W	
R3255	1-249-421-11	CARBON	2.2K	5%	1/4W	
R3256	1-249-409-11	CARBON	220	5%	1/4W	
R3257	1-249-409-11	CARBON	220	5%	1/4W	
R3258	1-249-441-11	CARBON	100K	5%	1/4W	
R3260	1-249-416-11	CARBON	820	5%	1/4W	
R3261	1-249-414-11	CARBON	560	5%	1/4W	
R3262	1-249-414-11	CARBON	560	5%	1/4W	
R3263	1-249-419-11	CARBON	1.5K	5%	1/4W	
R3264	1-249-414-11	CARBON	560	5%	1/4W	
R3265	1-249-418-11	CARBON	1.2K	5%	1/4W	
R3266	1-249-419-11	CARBON	1.5K	5%	1/4W	
R3267	1-249-409-11	CARBON	220	5%	1/4W	
R3268	1-249-411-11	CARBON	330	5%	1/4W	
R3269	1-247-901-11	CARBON	820K	5%	1/4W	
R3270	1-249-405-11	CARBON	100	5%	1/4W	
R3271	1-249-417-11	CARBON	1K	5%	1/4W	
R3272	1-249-421-11	CARBON	2.2K	5%	1/4W	
R3273	1-249-417-11	CARBON	1K	5%	1/4W	
R3274	1-249-405-11	CARBON	100	5%	1/4W	
R3275	1-249-417-11	CARBON	1K	5%	1/4W	
R3276	1-249-417-11	CARBON	1K	5%	1/4W	

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

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REF.NO.	PART NO.	DESCRIPTION				REMARK
R3277	1-249-425-11	CARBON	4.7K	5%	1/4W	
R3278	1-249-429-11	CARBON	10K	5%	1/4W	
R3279	1-249-428-11	CARBON	8.2K	5%	1/4W	
R3280	1-249-437-11	CARBON	47K	5%	1/4W	
R3281	⚠1-216-450-91	METAL OXIDE	82	5%	2W	F
R3282	1-249-424-11	CARBON	3.9K	5%	1/4W	
R3283	1-249-417-11	CARBON	1K	5%	1/4W	
R3284	1-249-419-11	CARBON	1.5K	5%	1/4W	
R3286	1-249-417-11	CARBON	1K	5%	1/4W	
R3287	1-215-421-00	METAL	1K	1%	1/4W	
R3288	1-249-417-11	CARBON	1K	5%	1/4W	
R3289	1-249-414-11	CARBON	560	5%	1/4W	
R3290	1-249-427-11	CARBON	6.8K	5%	1/4W	
R3293	1-249-429-11	CARBON	10K	5%	1/4W	
R3294	1-249-437-11	CARBON	47K	5%	1/4W	
R3295	1-249-421-11	CARBON	2.2K	5%	1/4W	
R3296	1-249-424-11	CARBON	3.9K	5%	1/4W	
R3297	1-249-415-11	CARBON	680	5%	1/4W	
R3800	1-259-884-11	CARBON	4.7M	5%	1/4W	
R3801	1-259-880-11	CARBON	2.2M	5%	1/4W	
R3802	1-249-429-11	CARBON	10K	5%	1/4W	
R3803	1-249-429-11	CARBON	10K	5%	1/4W	
R3804	1-249-429-11	CARBON	10K	5%	1/4W	
R3805	1-249-441-11	CARBON	100K	5%	1/4W	
R3807	1-249-419-11	CARBON	1.5K	5%	1/4W	
R3808	1-249-419-11	CARBON	1.5K	5%	1/4W	
R3809	1-249-417-11	CARBON	1K	5%	1/4W	
R3810	1-249-420-11	CARBON	1.8K	5%	1/4W	
R3811	1-249-414-11	CARBON	560	5%	1/4W	
R3812	1-249-420-11	CARBON	1.8K	5%	1/4W	
R3813	1-249-417-11	CARBON	1K	5%	1/4W	
R3814	1-249-417-11	CARBON	1K	5%	1/4W	
R3815	1-247-899-11	CARBON	680K	5%	1/4W	
R3816	1-247-887-00	CARBON	220K	5%	1/4W	
R3817	1-249-423-11	CARBON	3.3K	5%	1/4W	
R3818	1-249-423-11	CARBON	3.3K	5%	1/4W	
R3819	1-249-435-11	CARBON	33K	5%	1/4W	
R3820	1-249-417-11	CARBON	1K	5%	1/4W	
R3821	1-249-429-11	CARBON	10K	5%	1/4W	
R3822	1-249-417-11	CARBON	1K	5%	1/4W	
R3823	1-249-417-11	CARBON	1K	5%	1/4W	
R3824	1-249-413-11	CARBON	470	5%	1/4W	
R3825	1-249-417-11	CARBON	1K	5%	1/4W	
R3827	1-249-409-11	CARBON	220	5%	1/4W	
R3828	1-249-405-11	CARBON	100	5%	1/4W	
R3830	1-249-433-11	CARBON	22K	5%	1/4W	
R3831	1-249-431-11	CARBON	15K	5%	1/4W	
R3832	1-249-431-11	CARBON	15K	5%	1/4W	
R3833	1-249-428-11	CARBON	8.2K	5%	1/4W	
R3834	1-249-426-11	CARBON	5.6K	5%	1/4W	
R3835	1-249-431-11	CARBON	15K	5%	1/4W	
R3836	1-249-413-11	CARBON	470	5%	1/4W	
R3837	1-249-421-11	CARBON	2.2K	5%	1/4W	
R3838	1-249-425-11	CARBON	4.7K	5%	1/4W	
R3839	1-249-417-11	CARBON	1K	5%	1/4W	
R3840	1-249-420-11	CARBON	1.8K	5%	1/4W	
R3841	1-249-415-11	CARBON	680	5%	1/4W	
R3842	1-249-419-11	CARBON	1.5K	5%	1/4W	
R3843	1-249-425-11	CARBON	4.7K	5%	1/4W	
R3844	1-249-411-11	CARBON	330	5%	1/4W	
R3845	1-249-425-11	CARBON	4.7K	5%	1/4W	
R3847	1-249-421-11	CARBON	2.2K	5%	1/4W	
R3848	1-249-421-11	CARBON	2.2K	5%	1/4W	
R3849	1-249-429-11	CARBON	10K	5%	1/4W	
R3850	1-249-424-11	CARBON	3.9K	5%	1/4W	
R3851	1-249-418-11	CARBON	1.2K	5%	1/4W	
R3852	1-249-416-11	CARBON	820	5%	1/4W	
R3853	1-249-420-11	CARBON	1.8K	5%	1/4W	
R3854	1-249-422-11	CARBON	2.7K	5%	1/4W	
R3855	1-249-424-11	CARBON	3.9K	5%	1/4W	
R3856	1-249-419-11	CARBON	1.5K	5%	1/4W	
R3857	1-249-423-11	CARBON	3.3K	5%	1/4W	
R3858	1-249-424-11	CARBON	3.9K	5%	1/4W	
R3859	1-249-424-11	CARBON	3.9K	5%	1/4W	
R3860	1-249-422-11	CARBON	2.7K	5%	1/4W	
R3861	1-249-422-11	CARBON	2.7K	5%	1/4W	
R3862	1-249-417-11	CARBON	1K	5%	1/4W	
R3863	1-249-418-11	CARBON	1.2K	5%	1/4W	
R3864	1-249-427-11	CARBON	6.8K	5%	1/4W	
R3865	1-249-436-11	CARBON	39K	5%	1/4W	
R3866	1-249-422-11	CARBON	2.7K	5%	1/4W	
R3872	1-249-435-11	CARBON	33K	5%	1/4W	
R3873	1-249-429-11	CARBON	10K	5%	1/4W	
R3874	1-249-424-11	CARBON	3.9K	5%	1/4W	
R3875	1-249-429-11	CARBON	10K	5%	1/4W	
R3876	1-249-439-11	CARBON	68K	5%	1/4W	
R3877	1-249-417-11	CARBON	1K	5%	1/4W	
R3878	1-249-433-11	CARBON	22K	5%	1/4W	
R3891	1-247-889-00	CARBON	270K	5%	1/4W	
R3894	1-249-409-11	CARBON	220	5%	1/4W	
R3895	1-249-409-11	CARBON	220	5%	1/4W	
R3896	1-249-425-11	CARBON	4.7K	5%	1/4W	

<VARIABLE RESISTOR>

RV3101	1-238-016-11	RES, ADJ, CARBON 10K
RV3801	1-238-015-11	RES, ADJ, CARBON 4.7K
RV3802	1-228-995-00	RES, ADJ, CARBON 22K
RV3804	1-238-017-11	RES, ADJ, CARBON 22K
RV3805	1-228-989-00	RES, ADJ, CARBON 470
RV3806	1-228-989-00	RES, ADJ, CARBON 470

<TUNER>

TU3201	⚠1-463-771-11	TUNER, ET (BTP-201A)

<CRYSTAL>

X3201	1-567-192-11	OSCILLATOR, CERAMIC 4MHz
X3801	1-567-505-11	OSCILLATOR, CRYSTAL 3.58MHz

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*1-638-668-11 F1 BOARD
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<CAPACITOR>

C2601	1-136-165-00	FILM	0.1MF	5%	50V
C2602	⚠1-102-125-91	CERAMIC	0.0047MF	10%	50V
C2603	⚠1-102-125-91	CERAMIC	0.0047MF	10%	50V
C2604	1-124-480-11	ELECT	470MF	20%	25V
C2605	1-124-480-11	ELECT	470MF	20%	25V
C2606	1-124-478-11	ELECT	100MF	20%	25V
C2608	1-101-005-00	CERAMIC	0.022MF		50V
C2609	1-136-165-00	FILM	0.1MF	5%	50V
C2610	1-101-005-00	CERAMIC	0.022MF		50V
C2611	1-101-006-00	CERAMIC	0.047MF		50V

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REF.NO.	PART NO.	DESCRIPTION				REMARK
C2612	1-102-129-00	CERAMIC	0.01MF	10%	50V	
C2613	1-124-477-11	ELECT	47MF	20%	16V	
		<DIODE>				
D2601	8-719-911-19	DIODE 1SS119				
D2602	⚠8-719-521-10	DIODE S1VB10-S				
		<CONNECTOR>				
F1-3	*1-560-123-00	PLUG, CONNECTOR (2.5MM PITCH)				
F1-62	*1-564-508-11	PLUG, CONNECTOR 5P				
F1-64	*1-564-511-11	PLUG, CONNECTOR 8P				
F1-77	*1-560-125-00	PLUG, CONNECTOR (2.5MM) 5P				
		<IC>				
IC2601	8-759-112-06	IC UPC78N05H				
		<TRANSISTOR>				
Q2601	8-729-423-37	TRANSISTOR 2SC3311A-QRS				
Q2602	8-729-423-37	TRANSISTOR 2SC3311A-QRS				
		<RESISTOR>				
R2601	1-249-440-11	CARBON	82K	5%	1/4W	
R2602	1-215-882-00	METAL OXIDE	22	5%	2W	F
R2603	1-216-425-11	METAL OXIDE	56	5%	1W	F
R2604	1-249-443-11	CARBON	0.47	5%	1/4W	F
R2605	1-249-429-11	CARBON	10K	5%	1/4W	
R2606	1-249-423-11	CARBON	3.3K	5%	1/4W	
R2607	1-249-434-11	CARBON	27K	5%	1/4W	
R2608	1-249-441-11	CARBON	100K	5%	1/4W	
R2609	1-249-435-11	CARBON	33K	5%	1/4W	
R2610	1-249-429-11	CARBON	10K	5%	1/4W	

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	*1-638-756-11	F2 BOARD ********			
	*1-533-189-11	HOLDER, FUSE			
		<CAPACITOR>			
C2651	1-124-477-11	ELECT	47MF	20%	16V
C2653	⚠1-136-311-11	FILM	0.47MF	20%	125V
C2654	1-136-346-11	FILM	0.22MF	20%	125V
		<DIODE>			
D2651	8-719-911-55	DIODE U05G			
		<FUSE>			
F2651	⚠1-532-748-11	FUSE, GLASS TUBE 6.3A/125V			
		<CONNECTOR>			
F2-2	*1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P			
F2-3	*1-560-123-00	PLUG, CONNECTOR (2.5MM PITCH)			
F2-4	*1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P			
F2-5	1-506-348-99	PIN, CONNECTOR 3P			
F2-6	*1-580-843-11	PIN, CONNECTOR (POWER)			

REF.NO.	PART NO.	DESCRIPTION				REMARK
F2-7	*1-580-843-11	PIN, CONNECTOR (POWER)				
		<TRANSISTOR>				
Q2651	8-729-140-96	TRANSISTOR 2SD774-34				
		<RESISTOR>				
R2651	1-249-417-11	CARBON	1K	5%	1/4W	
R2652	1-249-433-11	CARBON	22K	5%	1/4W	
		<RELAY>				
RL2651	⚠1-515-626-11	RELAY				
		<TRANSFORMER>				
T2651	⚠1-424-220-11	TRANSFORMER, LINE FILTER				
		<THERMISTOR>				
THP265	⚠1-808-081-23	THERMISTOR, POSITIVE				

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	*A-1245-526-A	F BOARD, COMPLETE *****************			
	1-533-190-11	FUSE CLIP			
	*1-533-189-11	HOLDER, FUSE			
	*1-565-514-11	SOCKET, CONNECTOR 2P			
	*4-341-751-01	EYELET (EY8-EY27)			
	*4-341-752-01	EYELET (EY1-EY7,EY28-38)			
		<CAPCITOR>			
C601	⚠1-136-311-51	FILM	0.47MF	20%	125V
C603	1-106-224-00	MYLAR	0.15MF	10%	100V
C604	1-101-821-00	CERAMIC	0.0022MF		500V
C605	⚠1-162-576-51	CERAMIC	0.001MF	10%	400V
C606	⚠1-161-953-52	CERAMIC	0.0047MF	20%	400V
C607	1-162-599-12	CERAMIC	0.0047MF	20%	400V
C610	1-124-477-11	ELECT	47MF	20%	16V
C611	1-124-122-11	ELECT	100MF	20%	25V
C613	1-124-122-11	ELECT	100MF	20%	25V
C616	⚠1-136-311-51	FILM	0.47MF	20%	125V
C617	1-101-821-00	CERAMIC	0.0022MF		500V
C618	1-124-477-11	ELECT	47MF	20%	16V
C622	1-125-538-11	ELECT(BLOCK)	1000MF	20%	200V
C650	1-161-830-00	CERAMIC	0.0047MF		500V
C651	1-124-799-11	ELECT	2.2MF	20%	160V
C652	⚠1-124-122-91	ELECT	100MF	20%	50V
C653	1-102-244-00	CERAMIC	220PF	10%	500V
C654	1-124-126-00	ELECT	47MF	20%	25V
C655	1-136-173-00	FILM	0.47MF	5%	50V
C656	1-106-383-00	MYLAR	0.047MF	10%	100V
C657	1-136-601-11	FILM	0.01MF	10%	630V
C658	1-162-114-00	CERAMIC	0.0047MF		2KV
C660	1-162-599-12	CERAMIC	0.0047MF	20%	400V
C661	1-102-125-00	CERAMIC	0.0047MF	10%	50V
C663	1-124-618-11	ELECT	2200MF	20%	35V
C664	1-126-588-11	ELECT	1000MF	20%	16V
C665	1-124-602-00	ELECT	2200MF	20%	25V
C666	1-125-564-11	ELECT(BLOCK)	1000MF	20%	160V
C667	1-102-129-00	CERAMIC	0.01MF	10%	50V

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REF.NO.	PART NO.	DESCRIPTION				REMARK
C668	1-162-116-00	CERAMIC	680PF	10%	2KV	
C672	1-124-122-11	ELECT	100MF	20%	25V	
C673	1-102-129-00	CERAMIC	0.01MF	10%	50V	
C674	1-124-126-00	ELECT	47MF	20%	16V	
		<DIODE>				
D601	⚠8-719-305-07	DIODE RBV-406H				
D602	8-719-911-55	DIODE U05G				
D603	8-719-911-55	DIODE U05G				
D604	8-719-911-19	DIODE 1SS119				
D605	8-719-911-55	DIODE U05G				
D607	8-719-911-19	DIODE 1SS119				
D651	8-719-911-19	DIODE 1SS119				
D652	8-719-300-33	DIODE RU-3AM				
D653	8-719-311-31	DIODE RU-1P				
D657	8-719-500-67	DIODE D5KC40H				
D658	8-719-301-45	DIODE RK14				
D659	8-719-500-41	DIODE D8LCA20				
D660	8-719-301-64	DIODE RU4DS				
		<CONNECTOR>				
F1	*1-580-843-11	PIN, CONNECTOR (POWER)				
F2	*1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P				
F4	*1-559-991-21	CONNECTOR ASSY 1P				
F5	*1-560-290-00	PLUG, CONNECTOR (2.5MM PITCH)				
F5A	*1-508-784-00	PIN, CONNECTOR (5MM PITCH) 1P				
F5B	*1-508-784-00	PIN, CONNECTOR (5MM PITCH) 1P				
F5C	*1-508-784-00	PIN, CONNECTOR (5MM PITCH) 1P				
F6	*1-564-506-11	PLUG, CONNECTOR 3P				
F61	*1-508-768-00	PIN, CONNECTOR (5MM PITCH) 6P				
F62	*1-564-508-11	PLUG, CONNECTOR 5P				
F64	*1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P				
F66	*1-568-378-21	PIN, CONNECTOR 3P				
F83	*1-564-505-11	PLUG, CONNECTOR 2P				
		<FUSE>				
F601	⚠1-532-748-11	FUSE, GLASS TUBE 6.3A/125V				
		<COIL>				
FB655	1-410-397-21	FERRITE BEAD INDUCTOR				
FB658	1-410-396-41	FERRITE BEAD INDUCTOR				
FB659	1-410-397-21	FERRITE BEAD INDUCTOR				
FB660	1-410-396-41	FERRITE BEAD INDUCTOR				
FB662	1-410-397-21	FERRITE BEAD INDUCTOR				
FB663	1-410-397-21	FERRITE BEAD INDUCTOR				
FB664	1-410-397-21	FERRITE BEAD INDUCTOR				
L601	1-459-104-00	COIL, DUST CORE				
L657	1-459-155-00	COIL (WITH CORE) 45UH				
L658	1-459-155-00	COIL (WITH CORE) 45UH				
L659	1-459-407-00	COIL, FERRITE CHOKE				
		<IC>				
IC651	⚠8-749-920-81	IC STR-S6301A				
	*4-363-404-00	HOLDER, IC; IC651				
	4-393-406-01	SHEET (R), RADIATION				
IC652	8-719-156-73	DIODE PS2501-1LB				
IC653	⚠8-749-920-62	IC SE-135NS				
IC654	⚠8-749-920-61	IC SE-135N				

REF.NO.	PART NO.	DESCRIPTION				REMARK
		<TRANSISTOR>				
Q602	8-729-140-96	TRANSISTOR 2SD774-34				
Q603	8-729-200-17	TRANSISTOR 2SA1091-O				
Q604	8-729-423-37	TRANSISTOR 2SC3311A-QRS				
Q651	⚠8-729-177-43	TRANSISTOR 2SD774-4				
Q652	8-729-423-37	TRANSISTOR 2SC3311A-QRS				
Q653	8-729-423-44	TRANSISTOR 2SA1309A-QRS				
Q654	8-729-423-44	TRANSISTOR 2SA1309A-QRS				
		<RESISTOR>				
R601	⚠1-202-723-51	SOLID	2.2M	10%	1/2W	
R602	⚠1-205-985-21	WIREWOUND	1.5	5%	20W	
R603	1-215-885-00	METAL OXIDE	68	5%	2W	F
R605	⚠1-202-723-51	SOLID	2.2M	10%	1/2W	
R606	1-215-885-00	METAL OXIDE	68	5%	2W	F
R607	1-249-426-11	CARBON	5.6K	5%	1/4W	
R608	1-247-887-00	CARBON	220K	5%	1/4W	
R609	1-249-421-11	CARBON	2.2K	5%	1/4W	
R610	1-249-417-11	CARBON	1K	5%	1/4W	
R611	1-207-645-00	WIREWOUND	0.47	10%	3W	F
R612	1-249-417-11	CARBON	1K	5%	1/4W	F
R613	1-249-441-11	CARBON	100K	5%	1/4W	
R614	1-249-429-11	CARBON	10K	5%	1/4W	
R615	1-247-895-00	CARBON	470K	5%	1/4W	
R616	1-249-417-11	CARBON	1K	5%	1/4W	
R617	1-249-414-11	CARBON	560	5%	1/4W	
R619	⚠1-216-341-51	METAL OXIDE	0.22	5%	1W	F
R620	1-216-444-11	METAL OXIDE	82K	5%	1W	F
R621	1-249-429-11	CARBON	10K	5%	1/4W	
R622	1-249-423-11	CARBON	3.3K	5%	1/4W	
R623	1-216-457-00	METAL OXIDE	1.2K	5%	2W	F
R624	1-216-458-11	METAL OXIDE	1.8K	5%	2W	F
R651	1-207-612-00	WIREWOUND	0.1	10%	2W	F
R652	1-207-612-00	WIREWOUND	0.1	10%	2W	F
R653	1-215-893-11	METAL OXIDE	1.5K	5%	2W	F
R654	1-205-945-11	WIREWOUND	33	10%	7W	F
R655	1-202-843-11	SOLID	270K	10%	1/2W	
R660	⚠1-249-414-51	CARBON	560	5%	1/4W	F
R661	1-249-413-11	CARBON	470	5%	1/4W	
R662	1-249-467-11	CARBON	68K	5%	1/4W	F
R663	⚠1-247-706-91	CARBON	330	5%	1/4W	F
R664	1-249-425-11	CARBON	4.7K	5%	1/4W	
R665	1-249-417-11	CARBON	1K	5%	1/4W	
R666	1-249-425-11	CARBON	4.7K	5%	1/4W	
R667	1-249-417-11	CARBON	1K	5%	1/4W	
R668	1-249-429-11	CARBON	10K	5%	1/4W	
R669	1-249-417-11	CARBON	1K	5%	1/4W	
R670	1-249-427-11	CARBON	6.8K	5%	1/4W	F
R671	1-202-730-00	SOLID	8.2M	10%	1/2W	
R672	1-249-455-11	CARBON	4.7	5%	1/4W	F
R675	1-215-881-11	METAL OXIDE	15	5%	2W	F
R676	1-216-446-00	METAL OXIDE	18	5%	2W	F
R690	1-205-945-11	WIREWOUND	33	10%	7W	F
R691	1-216-468-11	METAL OXIDE	82K	5%	2W	F
R692	1-216-468-11	METAL OXIDE	82K	5%	2W	F
R693	1-216-468-11	METAL OXIDE	82K	5%	2W	F
R694	1-216-468-11	METAL OXIDE	82K	5%	2W	F
R695	1-216-468-11	METAL OXIDE	82K	5%	2W	F
R696	1-207-682-00	WIREWOUND	47	10%	5W	F

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<RELAY>

REF.NO.	PART NO.	DESCRIPTION	REMARK
RY601	⚠1-515-684-22	RELAY	

<TRANSFORMER>

REF.NO.	PART NO.	DESCRIPTION	REMARK
T601	⚠1-424-220-21	TRANSFORMER, LINE FILTER	
T602	⚠1-424-205-21	TRANSFORMER, LINE FILTER	
T603	⚠1-448-916-11	TRANSFORMER, POWER	
T651	⚠1-449-607-11	TRANSFORMER	

****

*A-1296-855-A A BOARD, COMPLETE
****

*4-341-751-01 EYELET (EY6-EY17,EY19,EY30-EY32)
*4-341-752-01 EYELET (EY1-EY5,EY20-EY29)

<CONNECTOR>

REF.NO.	PART NO.	DESCRIPTION
A10	*1-560-124-00	PLUG, CONNECTOR (2.5MM PITCH)
A11	*1-564-513-11	PLUG, CONNECTOR 10P
A12	*1-564-512-11	PLUG, CONNECTOR 9P
A13	*1-565-509-11	CONNECTOR, BOARD TO BOARD 18P
A14	*1-564-511-11	PLUG, CONNECTOR 8P
A24	*1-568-371-11	PIN, CONNECTOR (PC BOARD) 15P
A25	*1-565-509-11	CONNECTOR, BOARD TO BOARD 18P
A26	*1-568-371-11	PIN, CONNECTOR (PC BOARD) 15P
A31	*1-564-509-11	PLUG, CONNECTOR 6P
A32	*1-564-508-11	PLUG, CONNECTOR 5P
A33	*1-564-511-11	PLUG, CONNECTOR 8P
A41	*1-508-784-00	PIN, CONNECTOR (5MM PITCH) 1P
A42	*1-564-505-11	PLUG, CONNECTOR 2P
A43	*1-560-290-00	PLUG, CONNECTOR (2.5MM PITCH)
A61	*1-508-768-00	PIN, CONNECTOR (5MM PITCH) 6P
A63	*1-564-507-11	PLUG, CONNECTOR 4P
A64	*1-564-511-11	PLUG, CONNECTOR 8P
A81	*1-568-536-11	PLUG (MINIATURE DY) 6P
A82	*1-508-768-00	PIN, CONNECTOR (5MM PITCH) 6P
A83	*1-564-505-11	PLUG, CONNECTOR 2P
A84	*1-564-508-11	PLUG, CONNECTOR 5P
A85	*1-560-290-00	PLUG, CONNECTOR (2.5MM PITCH)

<CAPACITOR>

REF.NO.	PART NO.	DESCRIPTION			REMARK
C101	1-124-261-00	ELECT	10MF	20%	50V
C102	1-126-233-11	ELECT	22MF	20%	25V
C103	1-124-360-00	ELECT	1000MF	20%	16V
C104	1-124-473-11	ELECT	1000MF	20%	10V
C106	1-136-153-00	FILM	0.01MF	5%	50V
C107	1-119-160-00	ELECT	470MF		10V
C108	1-124-907-11	ELECT	10MF	20%	50V
C109	1-164-070-11	CERAMIC	100PF	5%	50V
C111	1-102-978-00	CERAMIC	220PF	5%	50V
C112	1-136-161-00	FILM	0.047MF	5%	50V
C113	1-124-903-11	ELECT	1MF	20%	50V
C114	1-102-978-00	CERAMIC	220PF	5%	50V
C115	1-102-978-00	CERAMIC	220PF	5%	50V
C116	1-164-070-11	CERAMIC	100PF	5%	50V
C117	1-164-054-11	CERAMIC	22PF	5%	50V
C118	1-102-121-00	CERAMIC	0.0022MF	10%	50V
C119	1-124-907-11	ELECT	10MF	20%	50V
C120	1-124-360-00	ELECT	1000MF	20%	16V
C121	1-136-165-00	FILM	0.1MF	5%	50V
C124	1-130-728-00	FILM	0.0022MF	5%	50V
C125	1-124-925-11	ELECT	2.2MF	20%	50V
C126	1-102-121-00	CERAMIC	0.0022MF	10%	50V
C129	1-136-173-00	FILM	0.47MF	5%	50V
C199	1-124-477-11	ELECT	47MF	20%	16V
C201	1-124-478-11	ELECT	100MF	20%	25V
C202	1-102-121-00	CERAMIC	0.0022MF	10%	50V
C203	1-102-121-00	CERAMIC	0.0022MF	10%	50V
C301	1-126-103-11	ELECT	470MF	20%	16V
C302	1-124-234-00	ELECT	22MF	20%	16V
C303	1-136-153-00	FILM	0.01MF	5%	50V
C304	1-124-903-11	ELECT	1MF	20%	50V
C305	1-124-902-00	ELECT	0.47MF	20%	50V
C306	1-124-234-00	ELECT	22MF	20%	16V
C307	1-102-978-00	CERAMIC	220PF	5%	50V
C308	1-164-033-11	CERAMIC	39PF	5%	50V
C309	1-136-165-00	FILM	0.1MF	5%	50V
C310	1-136-165-00	FILM	0.1MF	5%	50V
C311	1-136-165-00	FILM	0.1MF	5%	50V
C312	1-136-169-00	FILM	0.22MF	5%	50V
C313	1-124-903-11	ELECT	1MF	20%	50V
C315	1-136-158-00	FILM	0.027MF	5%	50V
C316	1-164-070-11	CERAMIC	100PF	5%	50V
C317	1-136-169-00	FILM	0.22MF	5%	50V
C318	1-136-169-00	FILM	0.22MF	5%	50V
C319	1-102-980-00	CERAMIC	270PF	5%	50V
C320	1-124-499-11	ELECT	1MF	20%	50V
C321	1-136-153-00	FILM	0.01MF	5%	50V
C322	1-124-903-11	ELECT	1MF	20%	50V
C324	1-102-114-00	CERAMIC	470PF	10%	50V
C325	1-102-114-00	CERAMIC	470PF	10%	50V
C326	1-124-903-11	ELECT	1MF	20%	50V
C327	1-130-479-00	MYLAR	0.0047MF	5%	50V
C328	1-124-907-11	ELECT	10MF	20%	50V
C329	1-124-799-11	ELECT	2.2MF	20%	160V
C330	1-119-507-11	ELECT	220MF		16V
C331	1-102-112-00	CERAMIC	330PF	10%	50V
C332	1-136-165-00	FILM	0.1MF	5%	50V
C333	1-124-903-11	ELECT	1MF	20%	50V
C334	1-136-161-00	FILM	0.047MF	5%	50V
C335	1-130-471-00	MYLAR	0.001MF	5%	50V
C336	1-130-471-00	MYLAR	0.001MF	5%	50V
C338	1-124-927-11	ELECT	4.7MF	20%	50V
C339	1-124-907-11	ELECT	10MF	20%	50V
C342	1-161-377-00	CERAMIC	0.0047MF	30%	50V
C344	1-126-176-11	ELECT	220MF	20%	10V
C351	1-136-169-00	FILM	0.22MF	5%	50V
C352	1-136-165-00	FILM	0.1MF	5%	50V
C353	1-124-902-00	ELECT	0.47MF	20%	50V
C500	1-130-475-00	MYLAR	0.0022MF	5%	50V
C501	1-124-122-11	ELECT	100MF	20%	50V
C502	⚠1-124-557-95	ELECT	1000MF	20%	25V
C503	1-124-126-00	ELECT	47MF	20%	25V
C504	1-106-216-00	MYLAR	0.068MF	10%	100V
C505	1-106-383-00	MYLAR	0.047MF	10%	100V
C506	1-106-385-00	MYLAR	0.056MF	10%	100V
C507	1-106-220-00	MYLAR	0.1MF	10%	100V
C508	1-136-161-00	FILM	0.047MF	5%	50V
C509	1-106-387-00	MYLAR	0.068MF	10%	200V
C510	1-102-228-00	CERAMIC	470PF	10%	500V
C511	1-123-024-21	ELECT	33MF		160V
C512	1-124-046-00	ELECT	10MF	20%	160V
C513	1-124-477-11	ELECT	47MF	20%	25V
C514	1-124-557-11	ELECT	1000MF	20%	25V

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REF.NO.	PART NO.	DESCRIPTION			REMARK
C515	1-162-114-00	CERAMIC	0.0047MF		2KV
C516	1-162-116-00	CERAMIC	680PF	10%	2KV
C517	1-162-116-00	CERAMIC	680PF	10%	2KV
C518	1-106-359-00	MYLAR	0.0047MF	10%	200V
C519	⚠1-136-732-11	FILM	0.021MF	3%	1.4KV
C521	1-162-115-00	CERAMIC	330PF	10%	2KV
C522	⚠1-136-316-51	FILM	0.056MF	5%	630V
C523	1-102-244-00	CERAMIC	220PF	10%	500V
C524	1-106-383-00	MYLAR	0.047MF		200V
C525	1-124-902-00	ELECT	0.47MF	20%	50V
C526	1-102-244-00	CERAMIC	220PF	10%	500V
C527	1-162-318-11	CERAMIC	0.001MF	10%	500V
C528	1-102-030-00	CERAMIC	330PF	10%	500V
C529	1-136-110-00	FILM	0.91MF	5%	200V
C530	1-123-947-00	ELECT	10MF	20%	250V
C531	1-130-475-00	MYLAR	0.0022MF	5%	50V
C532	1-130-475-00	MYLAR	0.0022MF	5%	50V
C533	1-130-471-00	MYLAR	0.001MF	5%	50V
C534	1-124-477-11	ELECT	47MF	20%	25V
C535	1-123-948-00	ELECT	22MF	20%	250V
C543	1-136-569-11	FILM	1.2MF	5%	200V
C544	1-106-343-00	MYLAR	0.001MF	10%	100V
C545	1-124-910-11	ELECT	47MF	20%	50V
C546	1-102-228-00	CERAMIC	470PF	10%	500V
C547	1-161-754-00	CERAMIC	0.001MF	10%	3KV
C548	1-126-163-11	ELECT	4.7MF	20%	50V
C549	1-126-176-11	ELECT	220MF	20%	10V
C550	1-136-540-11	FILM	0.82MF	5%	200V
C551	1-124-927-11	ELECT	4.7MF	20%	50V
C552	1-102-228-00	CERAMIC	470PF	10%	500V
C553	1-124-907-11	ELECT	10MF	20%	50V
C554	1-164-075-11	CERAMIC	150PF	10%	50V
C555	1-136-161-00	FILM	0.047MF	5%	50V
C556	1-123-932-00	ELECT	4.7MF	20%	160V
C557	1-102-114-00	CERAMIC	470PF	10%	50V
C558	1-136-161-00	FILM	0.047MF	5%	50V
C559	1-136-165-00	FILM	0.1MF	5%	50V
C581	1-124-478-11	ELECT	100MF	20%	25V
C582	1-124-478-11	ELECT	100MF	20%	25V
C583	1-124-478-11	ELECT	100MF	20%	25V
C584	1-124-478-11	ELECT	100MF	20%	25V
C585	1-124-478-11	ELECT	100MF	20%	25V
C586	1-124-478-11	ELECT	100MF	20%	25V
C1701	1-102-976-00	CERAMIC	180PF	5%	50V
C1702	1-164-070-11	CERAMIC	100PF	5%	50V
C1703	1-124-477-11	ELECT	47MF	20%	16V
C1704	1-102-121-00	CERAMIC	0.0022MF	10%	50V

<COMPOSITION CIRCUIT BLOCK>

CP101	1-231-682-00	COMPOSITION CIRCUIT BLOCK
CP102	1-236-301-11	NETWORK, C
CP103	1-236-491-11	NETWORK, RES, THICK FILM
CP104	1-232-682-11	COMPOSITION CIRCUIT BLOCK
CP105	1-236-479-11	NETWORK, C
CP106	1-236-479-11	NETWORK, C
CP108	1-236-358-21	NETWORK, RES
CP109	1-236-358-21	NETWORK, RES
CP110	1-236-294-11	NETWORK, RES
CP111	1-232-680-11	COMPOSITION CIRCUIT BLOCK

<DIODE>

REF.NO.	PART NO.	DESCRIPTION	REMARK
D101	8-719-110-78	DIODE RD33ES-B2	
D102	8-719-911-19	DIODE 1SS119	
D103	8-719-911-19	DIODE 1SS119	
D104	8-719-987-06	DIODE WG713A	
D105	8-719-974-81	DIODE 1SV113	
D112	8-719-911-19	DIODE 1SS119	
D113	8-719-911-19	DIODE 1SS119	
D114	8-719-911-19	DIODE 1SS119	
D301	8-719-110-48	DIODE RD18ES-B1	
D302	8-719-109-89	DIODE RD5.6ES-B2	
D303	8-719-109-84	DIODE RD5.1ES-B1	
D304	8-719-109-96	DIODE RD6.8ES-B1	
D305	8-719-109-93	DIODE RD6.2ES-B2	
D307	8-719-911-19	DIODE 1SS119	
D308	8-719-911-19	DIODE 1SS119	
D310	8-719-911-19	DIODE 1SS119	
D311	8-719-110-48	DIODE RD18ES-B1	
D350	8-719-109-89	DIODE RD5.6ES-B2	
D500	8-719-911-55	DIODE U05G	
D501	8-719-300-33	DIODE RU-3AM	
D502	8-719-902-85	DIODE RG3G-5007L	
D503	8-719-979-85	DIODE EGP20G	
D504	8-719-500-26	DIODE D5KD20H	
D505	8-719-976-64	DIODE RGP02-17	
D506	8-719-911-19	DIODE 1SS119	
D507	8-719-300-33	DIODE RU-3AM	
D508	8-719-911-19	DIODE 1SS119	
D509	8-719-911-19	DIODE 1SS119	
D510	8-719-109-89	DIODE RD5.6ES-B2	
D511	8-719-902-85	DIODE RG3G-5007L	
D512	8-719-311-87	DIODE FMS-3FU	
	*4-393-401-01	SPRING; D512	
D513	8-719-911-19	DIODE 1SS119	
D514	8-719-911-19	DIODE 1SS119	
D515	8-719-911-19	DIODE 1SS119	
D517	8-719-110-72	DIODE RD30ES-B1	
D531	8-719-911-19	DIODE 1SS119	
D533	8-719-109-81	DIODE RD4.7ES-B2	
D539	⚠8-719-302-43	DIODE EL1Z	
D1701	8-719-109-96	DIODE RD6.8ES-B1	

<IC>

IC101	8-759-636-30	IC M37200M6-A16SP
IC102	8-759-972-43	IC PCD8582
IC103	8-759-403-44	IC MN1280-S
IC301	⚠8-752-035-52	IC CXA1213S
IC500	8-759-980-58	IC TDA8172
	*4-393-401-01	SPRING; IC500
	4-393-405-01	SHEET (V), RADIATION; IC500
IC531	8-759-103-93	IC UPC393C
IC581	⚠8-759-142-04	IC UPC7893HF
	*4-393-401-01	SPRING; IC581
IC582	⚠8-759-142-04	IC UPC7893HF
	*4-368-683-01	SPRING; IC582
IC901	⚠8-759-924-12	IC LM7805CT
IC1701	8-759-978-66	IC MB88201-638L

<IF BLOCK>

IF201	1-464-755-21	IF BLOCK (IFE-450A)

<COIL>

L101	1-408-421-00	INDUCTOR	100UH

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REF.NO.	PART NO.	DESCRIPTION	REMARK
L102	1-408-415-00	INDUCTOR 33UH	
L201	1-408-408-00	INDUCTOR 8.2UH	
L500	1-422-613-11	COIL, AIR CORE	
L501	1-459-148-00	COIL	
L502	1-408-225-00	INDUCTOR 3.3UH	
L503	1-422-613-11	COIL, AIR CORE	
L505	**⚠1-410-669-41**	**INDUCTOR 33UH**	
L506	1-408-225-00	INDUCTOR 3.3UH	
L507	1-421-541-00	COIL, CHOKE 1000UH	
L508	**⚠1-424-206-11**	**COIL, PIN MODULATION**	
L509	1-422-613-11	COIL, AIR CORE	
L510	1-459-148-00	COIL	
L511	1-408-225-00	INDUCTOR 3.3UH	
L512	**⚠1-459-973-21**	**COIL, HORIZONTAL LINEARITY**	
L513	1-408-698-00	INDUCTOR 8.2UH	
L514	**⚠1-408-698-21**	**INDUCTOR 8.2UH**	
L1701	1-408-413-00	INDUCTOR 22UH	

<NEON LAMP>

NL501	1-519-108-99	LAMP, NEON	

<MODULE>

PM501	**⚠1-808-690-11**	**MODULE, PROTECTOR (PM-14)**	

<TRANSISTOR>

Q101	8-729-423-37	TRANSISTOR 2SC3311A-QRS	
Q103	8-729-423-44	TRANSISTOR 2SA1309A-QRS	
Q104	8-729-423-44	TRANSISTOR 2SA1309A-QRS	
Q107	8-729-423-37	TRANSISTOR 2SC3311A-QRS	
Q110	8-729-423-37	TRANSISTOR 2SC3311A-QRS	
Q112	8-729-900-89	TRANSISTOR DTC144ES	
Q113	8-729-900-89	TRANSISTOR DTC144ES	
Q114	8-729-900-89	TRANSISTOR DTC144ES	
Q170	8-729-423-37	TRANSISTOR 2SC3311A-QRS	
Q201	8-729-423-37	TRANSISTOR 2SC3311A-QRS	
Q301	8-729-423-44	TRANSISTOR 2SA1309A-QRS	
Q302	8-729-900-89	TRANSISTOR DTC144ES	
Q303	8-729-423-44	TRANSISTOR 2SA1309A-QRS	
Q304	8-729-423-44	TRANSISTOR 2SA1309A-QRS	
Q305	8-729-900-89	TRANSISTOR DTC144ES	
Q306	8-729-423-44	TRANSISTOR 2SA1309A-QRS	
Q307	8-729-423-37	TRANSISTOR 2SC3311A-QRS	
Q308	8-729-900-89	TRANSISTOR DTC144ES	
Q310	8-729-423-37	TRANSISTOR 2SC3311A-QRS	
Q311	8-729-423-37	TRANSISTOR 2SC3311A-QRS	
Q312	8-729-423-44	TRANSISTOR 2SA1309A-QRS	
Q313	8-729-423-37	TRANSISTOR 2SC3311A-QRS	
Q314	8-729-423-37	TRANSISTOR 2SC3311A-QRS	
Q351	8-729-423-37	TRANSISTOR 2SC3311A-QRS	
Q352	8-729-423-37	TRANSISTOR 2SC3311A-QRS	
Q501	8-729-423-37	TRANSISTOR 2SC3311A-QRS	
Q502	8-729-119-80	TRANSISTOR 2SC2688-LK	
Q503	8-729-304-50	TRANSISTOR 2SD1941-06	
	*4-393-401-01	SPRING; Q503	
Q504	8-729-423-37	TRANSISTOR 2SC3311A-QRS	
Q505	8-729-208-72	TRANSISTOR 2SC3298B-Y	
Q506	8-729-423-44	TRANSISTOR 2SA1309A-QRS	

<RESISTOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
R101	1-249-425-11	CARBON	4.7K	5%	1/4W	
R102	1-249-416-11	CARBON	820	5%	1/4W	
R103	1-215-896-00	METAL OXIDE	4.7K	5%	2W	F
R104	1-249-425-11	CARBON	4.7K	5%	1/4W	
R105	1-249-429-11	CARBON	10K	5%	1/4W	
R106	1-249-421-11	CARBON	2.2K	5%	1/4W	
R107	1-249-417-11	CARBON	1K	5%	1/4W	
R108	1-249-421-11	CARBON	2.2K	5%	1/4W	
R109	1-249-421-11	CARBON	2.2K	5%	1/4W	
R110	1-249-421-11	CARBON	2.2K	5%	1/4W	
R111	1-249-421-11	CARBON	2.2K	5%	1/4W	
R112	1-249-421-11	CARBON	2.2K	5%	1/4W	
R113	1-249-421-11	CARBON	2.2K	5%	1/4W	
R114	1-249-421-11	CARBON	2.2K	5%	1/4W	
R115	1-249-421-11	CARBON	2.2K	5%	1/4W	
R116	1-249-409-11	CARBON	220	5%	1/4W	
R117	1-249-409-11	CARBON	220	5%	1/4W	
R118	1-249-409-11	CARBON	220	5%	1/4W	
R119	1-249-431-11	CARBON	15K	5%	1/4W	
R120	1-249-421-11	CARBON	2.2K	5%	1/4W	
R121	1-249-421-11	CARBON	2.2K	5%	1/4W	
R122	1-249-421-11	CARBON	2.2K	5%	1/4W	
R123	1-249-421-11	CARBON	2.2K	5%	1/4W	
R124	1-249-421-11	CARBON	2.2K	5%	1/4W	
R125	1-249-429-11	CARBON	10K	5%	1/4W	
R126	1-249-429-11	CARBON	10K	5%	1/4W	
R127	1-249-413-11	CARBON	470	5%	1/4W	
R128	1-249-425-11	CARBON	4.7K	5%	1/4W	
R129	1-249-413-11	CARBON	470	5%	1/4W	
R130	1-249-437-11	CARBON	47K	5%	1/4W	
R131	1-249-429-11	CARBON	10K	5%	1/4W	
R132	1-249-429-11	CARBON	10K	5%	1/4W	
R133	1-249-421-11	CARBON	2.2K	5%	1/4W	
R134	1-249-421-11	CARBON	2.2K	5%	1/4W	
R135	1-249-429-11	CARBON	10K	5%	1/4W	
R136	1-249-429-11	CARBON	10K	5%	1/4W	
R137	1-249-409-11	CARBON	220	5%	1/4W	
R138	1-249-425-11	CARBON	4.7K	5%	1/4W	
R139	1-249-421-11	CARBON	2.2K	5%	1/4W	
R140	1-249-413-11	CARBON	470	5%	1/4W	
R141	1-249-427-11	CARBON	6.8K	5%	1/4W	
R142	1-249-437-11	CARBON	47K	5%	1/4W	
R143	1-249-437-11	CARBON	47K	5%	1/4W	
R144	1-215-896-00	METAL OXIDE	4.7K	5%	2W	F
R145	1-249-429-11	CARBON	10K	5%	1/4W	
R146	1-247-903-00	CARBON	1M	5%	1/4W	
R147	1-249-429-11	CARBON	10K	5%	1/4W	
R148	1-249-429-11	CARBON	10K	5%	1/4W	
R149	1-215-897-11	METAL OXIDE	6.8K	5%	2W	F
R150	1-249-441-11	CARBON	100K	5%	1/4W	
R151	1-249-437-11	CARBON	47K	5%	1/4W	
R152	1-249-425-11	CARBON	4.7K	5%	1/4W	
R153	1-249-429-11	CARBON	10K	5%	1/4W	
R154	1-249-429-11	CARBON	10K	5%	1/4W	
R155	1-249-441-11	CARBON	100K	5%	1/4W	
R156	1-249-409-11	CARBON	220	5%	1/4W	
R158	1-249-429-11	CARBON	10K	5%	1/4W	
R159	1-249-437-11	CARBON	47K	5%	1/4W	
R160	1-247-887-00	CARBON	220K	5%	1/4W	
R161	1-249-409-11	CARBON	220	5%	1/4W	
R162	1-249-409-11	CARBON	220	5%	1/4W	
R163	1-249-421-11	CARBON	2.2K	5%	1/4W	
R164	1-249-409-11	CARBON	220	5%	1/4W	
R165	1-249-409-11	CARBON	220	5%	1/4W	

REF.NO.	PART NO.	DESCRIPTION				REMARK
R166	1-249-409-11	CARBON	220	5%	1/4W	
R167	1-249-425-11	CARBON	4.7K	5%	1/4W	
R168	1-249-429-11	CARBON	10K	5%	1/4W	
R169	1-249-429-11	CARBON	10K	5%	1/4W	
R170	1-249-429-11	CARBON	10K	5%	1/4W	
R171	1-249-421-11	CARBON	2.2K	5%	1/4W	
R172	1-249-429-11	CARBON	10K	5%	1/4W	
R173	1-249-421-11	CARBON	2.2K	5%	1/4W	
R174	1-249-421-11	CARBON	2.2K	5%	1/4W	
R175	1-249-421-11	CARBON	2.2K	5%	1/4W	
R177	1-249-409-11	CARBON	220	5%	1/4W	
R178	1-249-413-11	CARBON	470	5%	1/4W	
R179	1-249-410-11	CARBON	270	5%	1/4W	
R181	1-249-417-11	CARBON	1K	5%	1/4W	
R182	1-249-421-11	CARBON	2.2K	5%	1/4W	
R183	1-249-421-11	CARBON	2.2K	5%	1/4W	
R184	1-249-417-11	CARBON	1K	5%	1/4W	
R185	1-249-417-11	CARBON	1K	5%	1/4W	
R186	1-249-421-11	CARBON	2.2K	5%	1/4W	
R187	1-249-421-11	CARBON	2.2K	5%	1/4W	
R188	1-249-425-11	CARBON	4.7K	5%	1/4W	
R189	1-249-433-11	CARBON	22K	5%	1/4W	
R190	1-249-421-11	CARBON	2.2K	5%	1/4W	
R191	1-249-421-11	CARBON	2.2K	5%	1/4W	
R192	1-249-421-11	CARBON	2.2K	5%	1/4W	
R194	1-249-417-11	CARBON	1K	5%	1/4W	
R195	1-249-421-11	CARBON	2.2K	5%	1/4W	
R196	1-249-417-11	CARBON	1K	5%	1/4W	
R197	1-259-884-11	CARBON	4.7M	5%	1/4W	
R198	1-249-421-11	CARBON	2.2K	5%	1/4W	
R200	1-249-417-11	CARBON	1K	5%	1/4W	
R201	1-249-425-11	CARBON	4.7K	5%	1/4W	
R202	1-249-429-11	CARBON	10K	5%	1/4W	
R203	1-249-434-11	CARBON	27K	5%	1/4W	
R204	1-249-436-11	CARBON	39K	5%	1/4W	
R205	1-249-411-11	CARBON	330	5%	1/4W	
R208	1-215-865-11	METAL OXIDE	220	5%	1W	F
R209	1-249-417-11	CARBON	1K	5%	1/4W	
R220	1-249-433-11	CARBON	22K	5%	1/4W	
R221	1-249-433-11	CARBON	22K	5%	1/4W	
R224	1-249-417-11	CARBON	1K	5%	1/4W	
R225	1-249-417-11	CARBON	1K	5%	1/4W	
R226	1-249-433-11	CARBON	22K	5%	1/4W	
R227	1-249-441-11	CARBON	100K	5%	1/4W	
R228	1-249-437-11	CARBON	47K	5%	1/4W	
R230	1-249-409-11	CARBON	220	5%	1/4W	
R231	1-249-411-11	CARBON	330	5%	1/4W	
R234	1-249-409-11	CARBON	220	5%	1/4W	
R236	1-249-417-11	CARBON	1K	5%	1/4W	
R301	1-215-448-00	METAL	13K	1%	1/4W	
R303	1-249-441-11	CARBON	100K	5%	1/4W	
R304	1-249-432-11	CARBON	18K	5%	1/4W	
R305	1-247-899-11	CARBON	680K	5%	1/4W	
R306	1-215-421-00	METAL	1K	1%	1/4W	
R307	1-249-405-11	CARBON	100	5%	1/4W	
R308	1-249-405-11	CARBON	100	5%	1/4W	
R309	1-249-405-11	CARBON	100	5%	1/4W	
R310	1-249-409-11	CARBON	220	5%	1/4W	
R311	1-249-409-11	CARBON	220	5%	1/4W	
R312	1-249-409-11	CARBON	220	5%	1/4W	
R313	1-249-409-11	CARBON	220	5%	1/4W	
R314	1-249-409-11	CARBON	220	5%	1/4W	
R315	1-249-417-11	CARBON	1K	5%	1/4W	
R316	1-249-425-11	CARBON	4.7K	5%	1/4W	
R317	1-249-429-11	CARBON	10K	5%	1/4W	
R318	1-249-437-11	CARBON	47K	5%	1/4W	
R320	1-249-429-11	CARBON	10K	5%	1/4W	
R321	1-249-441-11	CARBON	100K	5%	1/4W	
R322	1-249-428-11	CARBON	8.2K	5%	1/4W	
R323	1-215-457-00	METAL	33K	1%	1/4W	
R324	1-249-405-11	CARBON	100	5%	1/4W	
R325	1-249-414-11	CARBON	560	5%	1/4W	
R326	1-249-421-11	CARBON	2.2K	5%	1/4W	
R327	1-249-417-11	CARBON	1K	5%	1/4W	
R328	1-249-413-11	CARBON	470	5%	1/4W	
R329	1-249-425-11	CARBON	4.7K	5%	1/4W	
R330	1-249-421-11	CARBON	2.2K	5%	1/4W	
R332	1-247-889-00	CARBON	270K	5%	1/4W	
R333	1-249-409-11	CARBON	220	5%	1/4W	
R334	1-249-420-11	CARBON	1.8K	5%	1/4W	
R335	1-247-887-00	CARBON	220K	5%	1/4W	
R336	1-249-405-11	CARBON	100	5%	1/4W	
R337	1-249-438-11	CARBON	56K	5%	1/4W	
R339	1-249-411-11	CARBON	330	5%	1/4W	
R340	1-249-405-11	CARBON	100	5%	1/4W	
R341	1-249-405-11	CARBON	100	5%	1/4W	
R342	1-249-405-11	CARBON	100	5%	1/4W	
R343	1-249-405-11	CARBON	100	5%	1/4W	
R344	1-249-405-11	CARBON	100	5%	1/4W	
R346	1-249-413-11	CARBON	470	5%	1/4W	
R347	1-259-884-11	CARBON	4.7M	5%	1/4W	
R349	1-249-409-11	CARBON	220	5%	1/4W	
R350	1-249-423-11	CARBON	3.3K	5%	1/4W	
R351	1-249-441-11	CARBON	100K	5%	1/4W	
R352	1-249-441-11	CARBON	100K	5%	1/4W	
R353	1-249-441-11	CARBON	100K	5%	1/4W	
R354	1-249-433-11	CARBON	22K	5%	1/4W	
R355	1-249-433-11	CARBON	22K	5%	1/4W	
R356	1-249-433-11	CARBON	22K	5%	1/4W	
R357	1-249-437-11	CARBON	47K	5%	1/4W	
R358	1-247-889-00	CARBON	270K	5%	1/4W	
R359	1-249-433-11	CARBON	22K	5%	1/4W	
R360	1-249-433-11	CARBON	22K	5%	1/4W	
R361	1-249-431-11	CARBON	15K	5%	1/4W	
R362	1-249-421-11	CARBON	2.2K	5%	1/4W	
R363	1-249-421-11	CARBON	2.2K	5%	1/4W	
R364	1-249-405-11	CARBON	100	5%	1/4W	
R365	1-249-405-11	CARBON	100	5%	1/4W	
R366	1-249-437-11	CARBON	47K	5%	1/4W	
R367	1-249-417-11	CARBON	1K	5%	1/4W	
R368	1-249-417-11	CARBON	1K	5%	1/4W	
R370	1-249-405-11	CARBON	100	5%	1/4W	
R371	1-249-413-11	CARBON	470	5%	1/4W	
R373	1-249-417-11	CARBON	1K	5%	1/4W	
R374	1-249-428-11	CARBON	8.2K	5%	1/4W	
R375	1-249-421-11	CARBON	2.2K	5%	1/4W	
R376	1-249-425-11	CARBON	4.7K	5%	1/4W	
R377	1-249-438-11	CARBON	56K	5%	1/4W	
R378	1-249-427-11	CARBON	6.8K	5%	1/4W	
R379	1-249-421-11	CARBON	2.2K	5%	1/4W	
R381	1-249-421-11	CARBON	2.2K	5%	1/4W	
R382	1-249-413-11	CARBON	470	5%	1/4W	
R383	1-249-429-11	CARBON	10K	5%	1/4W	
R385	1-247-903-00	CARBON	1M	5%	1/4W	
R386	1-249-417-11	CARBON	1K	5%	1/4W	
R388	1-249-409-11	CARBON	220	5%	1/4W	
R500	1-249-433-11	CARBON	22K	5%	1/4W	

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une trame et par une marque ⚠ sont d'une importance critique pour la sécurité. Ne les remplacer que par des pièces de numéro spécifié.

REF.NO.	PART NO.	DESCRIPTION				REMARK
R501	1-249-435-11	CARBON	33K	5%	1/4W	
R502	1-216-371-00	METAL OXIDE	1.5	5%	2W	F
R503	1-247-870-11	CARBON	43K	5%	1/4W	
R504	1-247-854-11	CARBON	9.1K	5%	1/4W	
R505	1-216-453-00	METAL OXIDE	270	5%	2W	F
R506	1-249-417-11	CARBON	1K	5%	1/4W	
R509	⚠ 1-247-899-11	CARBON	680K	5%	1/4W	
R510	1-249-393-11	CARBON	10	5%	1/4W	F
R511	1-249-436-11	CARBON	39K	5%	1/4W	
R513	1-249-425-11	CARBON	4.7K	5%	1/4W	
R514	1-249-417-11	CARBON	1K	5%	1/4W	
R515	1-247-692-11	CARBON	22	5%	1/4W	F
R516	⚠ 1-249-443-91	CARBON	0.47	5%	1/4W	F
R517	⚠ 1-216-355-91	METAL OXIDE	3.3	5%	1W	F
R518	1-249-482-11	CARBON	4.7	5%	1/2W	F
R519	⚠ 1-215-871-91	METAL OXIDE	2.2K	5%	1W	F
R521	⚠ 1-249-469-91	CARBON	100K	5%	1/4W	F
R522	1-215-868-00	METAL OXIDE	680	5%	1W	F
R523	1-216-341-11	METAL OXIDE	0.22	5%	1W	F
R524	1-215-890-11	METAL OXIDE	470	5%	2W	F
R527	⚠ 1-249-443-91	CARBON	0.47	5%	1/4W	F
R528	1-215-881-11	METAL OXIDE	15	5%	2W	F
R529	1-249-426-11	CARBON	5.6K	5%	1/4W	
R530	1-249-438-11	CARBON	56K	5%	1/4W	
R531	1-216-479-11	METAL OXIDE	560	5%	3W	F
R533	1-249-429-11	CARBON	10K	5%	1/4W	
R534	1-249-437-11	CARBON	47K	5%	1/4W	
R535	1-215-454-00	METAL	24K	1%	1/4W	
R536	1-215-479-00	METAL	270K	1%	1/4W	
R537	1-247-883-00	CARBON	150K	5%	1/4W	
R538	1-247-885-00	CARBON	180K	5%	1/4W	
R539	1-216-479-11	METAL OXIDE	560	5%	3W	F
R541	1-215-437-00	METAL	4.7K	1%	1/4W	
R542	1-249-441-11	CARBON	100K	5%	1/4W	
R549	⚠ [illegible]	CARBON	[illegible]	[illegible]	1/4W	
R551	1-249-413-11	CARBON	470	5%	1/4W	
R552	1-249-405-11	CARBON	100	5%	1/4W	F
R553	1-249-401-11	CARBON	47	5%	1/4W	
R554	1-249-423-11	CARBON	3.3K	5%	1/4W	
R555	1-247-722-11	CARBON	5.6K	5%	1/4W	F
R556	⚠ 1-247-694-91	CARBON	33	5%	1/4W	F
R558	1-215-890-11	METAL OXIDE	470	5%	2W	F
R559	⚠ 1-215-880-91	METAL OXIDE	10	5%	2W	F
R560	1-247-889-00	CARBON	270K	5%	1/4W	
R561	1-249-437-11	CARBON	47K	5%	1/4W	
R562	1-247-734-11	CARBON	39	5%	1/2W	F
R563	1-215-890-11	METAL OXIDE	470	5%	2W	F
R564	⚠ 1-247-847-91	CARBON	4.7K	5%	1/4W	
R567	⚠ [illegible]	CARBON	[illegible]	[illegible]	1/4W	
R568	1-249-431-11	CARBON	15K	5%	1/4W	
R569	1-249-425-11	CARBON	4.7K	5%	1/4W	
R570	1-249-437-11	CARBON	47K	5%	1/4W	
R571	⚠ 1-213-046-61	FUSIBLE	2.7	5%	1W	F
R572	⚠ 1-216-377-91	METAL OXIDE	4.7	5%	2W	F
R573	⚠ 1-216-377-91	METAL OXIDE	4.7	5%	2W	F
R574	1-249-409-11	CARBON	220	5%	1/4W	F
R575	1-249-405-11	CARBON	100	5%	1/4W	
R610	1-249-409-11	CARBON	220	5%	1/4W	
R1701	1-249-417-11	CARBON	1K	5%	1/4W	
R1702	1-249-417-11	CARBON	1K	5%	1/4W	
R1703	1-249-417-11	CARBON	1K	5%	1/4W	
R1704	1-249-417-11	CARBON	1K	5%	1/4W	
R1705	1-249-417-11	CARBON	1K	5%	1/4W	
R1706	1-249-417-11	CARBON	1K	5%	1/4W	
R1707	1-249-417-11	CARBON	1K	5%	1/4W	
R1708	1-249-417-11	CARBON	1K	5%	1/4W	
R1709	1-249-417-11	CARBON	1K	5%	1/4W	
R1710	1-249-417-11	CARBON	1K	5%	1/4W	
R1711	1-249-417-11	CARBON	1K	5%	1/4W	
R1712	1-249-417-11	CARBON	1K	5%	1/4W	
R1713	1-249-429-11	CARBON	10K	5%	1/4W	
R1714	1-249-429-11	CARBON	10K	5%	1/4W	
R1715	1-249-429-11	CARBON	10K	5%	1/4W	

<SPARK GAP>

SG501	1-519-422-11	GAP, SPARK

<TRANSFORMER>

T500	⚠ 1-439-457-11	TRANSFORMER ASSY, FLYBACK
T501	⚠ 1-437-195-12	TRANSFORMER, HORIZONTAL DRIVE
T502	⚠ 1-413-059-11	TRANSFORMER, FERRITE (DFT)

<TUNER>

TU101	⚠ 1-463-771-11	TUNER, ET (BTP-201A)

<CRYSTAL>

X101	1-577-082-11	VIBRATOR, CERAMIC	4MHz
X301	1-567-505-11	OSCILLATOR, CRYSTAL	3.58MHz

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*1-635-250-11 X1 BOARD
****

<CAPACITOR>

C251	1-124-903-11	ELECT	1MF	20%	50V
C252	1-136-157-00	FILM	0.022MF	5%	50V
C253	1-124-903-11	ELECT	1MF	20%	50V
C254	1-130-309-00	FILM	0.033MF	5%	100V
C255	1-124-903-11	ELECT	1MF	20%	50V
C256	1-124-478-11	ELECT	100MF	20%	25V
C257	1-124-927-11	ELECT	4.7MF	20%	50V
C258	1-124-902-00	ELECT	0.47MF	20%	50V
C259	1-124-903-11	ELECT	1MF	20%	50V
C260	1-124-903-11	ELECT	1MF	20%	50V
C261	1-131-347-00	TANTALUM	1MF	20%	16V
C262	1-124-903-11	ELECT	1MF	20%	50V
C263	1-124-903-11	ELECT	1MF	20%	50V
C264	1-124-907-11	ELECT	10MF	20%	50V
C265	1-136-170-00	FILM	0.27MF	5%	50V
C266	1-124-907-11	ELECT	10MF	20%	50V
C267	1-131-368-00	TANTALUM	3.3MF	10%	16V
C268	1-124-903-11	ELECT	1MF	20%	50V
C269	1-131-347-00	TANTALUM	1MF	20%	16V
C270	1-124-903-11	ELECT	1MF	20%	50V
C271	1-124-907-11	ELECT	10MF	20%	50V
C272	1-124-903-11	ELECT	1MF	20%	50V
C273	1-124-477-11	ELECT	47MF	20%	16V
C274	1-130-475-00	MYLAR	0.0022MF	5%	50V
C275	1-130-475-00	MYLAR	0.0022MF	5%	50V
C276	1-102-074-00	CERAMIC	0.001MF	10%	50V
C277	1-124-907-11	ELECT	10MF	20%	50V
C278	1-124-903-11	ELECT	1MF	20%	50V

REF.NO.	PART NO.	DESCRIPTION			REMARK
C280	1-124-907-11	ELECT	10MF	20%	50V
C281	1-124-907-11	ELECT	10MF	20%	50V
C282	1-124-927-11	ELECT	4.7MF	20%	50V
C284	1-124-927-11	ELECT	4.7MF	20%	50V
C285	1-136-171-00	FILM	0.33MF	5%	50V
C286	1-136-175-00	FILM	0.68MF	5%	50V
C290	1-124-907-11	ELECT	10MF	20%	50V
C291	1-124-907-11	ELECT	10MF	20%	50V
C292	1-124-907-11	ELECT	10MF	20%	50V
C293	1-126-233-11	ELECT	22MF	20%	50V
C294	1-124-907-11	ELECT	10MF	20%	50V
C295	1-101-005-00	CERAMIC	0.022MF		50V
C296	1-101-005-00	CERAMIC	0.022MF		50V

<DIODE>

D251	8-719-110-48	DIODE RD18ES-B1
D252	8-719-110-48	DIODE RD18ES-B1
D253	8-719-110-48	DIODE RD18ES-B1
D270	8-719-109-90	DIODE RD5.6ES-B3
D271	8-719-911-19	DIODE 1SS119

<IC>

IC251	8-752-037-24	IC CXA1264AS

<TRANSISTOR>

Q270	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q271	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q272	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q273	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q280	8-729-423-37	TRANSISTOR 2SC3311A-QRS
Q281	8-729-423-37	TRANSISTOR 2SC3311A-QRS

<RESISTOR>

R251	1-215-443-00	METAL	8.2K	1%	1/4W
R252	1-215-443-00	METAL	8.2K	1%	1/4W
R253	1-249-409-11	CARBON	220	5%	1/4W
R254	1-249-409-11	CARBON	220	5%	1/4W
R255	1-249-420-11	CARBON	1.8K	5%	1/4W
R256	1-249-405-11	CARBON	100	5%	1/4W
R257	1-215-445-00	METAL	10K	1%	1/4W
R258	1-215-445-00	METAL	10K	1%	1/4W
R259	1-249-409-11	CARBON	220	5%	1/4W
R260	1-249-409-11	CARBON	220	5%	1/4W
R261	1-249-409-11	CARBON	220	5%	1/4W
R262	1-249-409-11	CARBON	220	5%	1/4W
R266	1-215-456-00	METAL	30K	1%	1/4W
R270	1-249-428-11	CARBON	8.2K	5%	1/4W
R271	1-249-428-11	CARBON	8.2K	5%	1/4W
R272	1-215-455-00	METAL	27K	1%	1/4W
R273	1-215-455-00	METAL	27K	1%	1/4W
R274	1-249-417-11	CARBON	1K	5%	1/4W
R275	1-249-417-11	CARBON	1K	5%	1/4W
R276	1-249-405-11	CARBON	100	5%	1/4W
R277	1-249-405-11	CARBON	100	5%	1/4W
R278	1-249-429-11	CARBON	10K	5%	1/4W
R279	1-249-429-11	CARBON	10K	5%	1/4W
R280	1-249-420-11	CARBON	1.8K	5%	1/4W
R281	1-249-428-11	CARBON	8.2K	5%	1/4W
R282	1-249-429-11	CARBON	10K	5%	1/4W
R283	1-249-429-11	CARBON	10K	5%	1/4W

REF.NO.	PART NO.	DESCRIPTION			REMARK
R284	1-249-441-11	CARBON	100K	5%	1/4W
R285	1-247-903-00	CARBON	1M	5%	1/4W
R286	1-249-393-11	CARBON	10	5%	1/4W
R290	1-215-441-00	METAL	6.8K	1%	1/4W
R291	1-215-441-00	METAL	6.8K	1%	1/4W
R292	1-249-433-11	CARBON	22K	5%	1/4W
R293	1-249-433-11	CARBON	22K	5%	1/4W
R294	1-249-433-11	CARBON	22K	5%	1/4W
R295	1-249-433-11	CARBON	22K	5%	1/4W

<CONNECTOR>

X23	*1-568-380-21	PIN, CONNECTOR 15P

****

*A-1331-146-A C BOARD, COMPLETE
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*4-379-160-01	COVER (REAR LID), CV
*4-379-167-01	COVER (MAIN), CV

<CONNECTOR>

C1	1-506-348-99	PIN, CONNECTOR 3P
C33	*1-564-511-11	PLUG, CONNECTOR 8P
C82	*1-508-768-00	PIN, CONNECTOR (5MM PITCH) 6P

<CAPACITOR>

C701	1-162-116-00	CERAMIC	680PF	10%	2KV
C702	1-136-601-11	FILM	0.01MF	5%	630V
C703	1-124-907-11	ELECT	10MF	20%	50V
C704	1-123-946-00	ELECT	4.7MF	20%	250V
C705	1-101-821-00	CERAMIC	0.0022MF		500V
C707	1-102-116-00	CERAMIC	680PF	10%	50V
C708	1-102-116-00	CERAMIC	680PF	10%	50V
C709	1-102-116-00	CERAMIC	680PF	10%	50V
C710	1-164-082-11	CERAMIC	560PF	10%	50V
C711	1-126-233-11	ELECT	22MF	20%	25V
C712	1-164-081-11	CERAMIC	470PF	10%	50V
C713	1-164-082-11	CERAMIC	560PF	10%	50V
C714	1-162-622-11	CERAMIC	330PF	10%	6.3KV
C715	1-102-074-00	CERAMIC	0.001MF	10%	50V
C718	1-102-074-00	CERAMIC	0.001MF	10%	50V
C720	1-126-233-11	ELECT	22MF	20%	25V
C721	1-102-074-00	CERAMIC	0.001MF	10%	50V
C730	1-102-116-00	CERAMIC	680PF	10%	50V
C731	1-102-116-00	CERAMIC	680PF	10%	50V
C732	1-102-116-00	CERAMIC	680PF	10%	50V

<DIODE>

D701	8-719-911-19	DIODE 1SS119
D702	8-719-911-19	DIODE 1SS119
D703	8-719-911-19	DIODE 1SS119
D704	8-719-911-19	DIODE 1SS119
D705	8-719-911-19	DIODE 1SS119
D706	8-719-911-19	DIODE 1SS119
D707	8-719-911-19	DIODE 1SS119
D708	8-719-911-19	DIODE 1SS119
D709	8-719-911-19	DIODE 1SS119
D710	8-719-901-83	DIODE 1SS83
D711	8-719-901-83	DIODE 1SS83
D712	8-719-901-83	DIODE 1SS83

Les composants identifiés par une trame et par une marque ⚠ sont d'une importance critique pour la sécurité. Ne les remplacer que par des pièces de numéro spécifié.

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION				REMARK
D713	8-719-901-83	DIODE 1SS83				

<JACK>

J701	⚠1-540-160-11	SOCKET, PICTURE TUBE	

<COIL>

L701	⚠1-408-417-31	INDUCTOR	47UH	
L702	1-408-421-00	INDUCTOR	100UH	
L703	1-408-420-00	INDUCTOR	82UH	
L704	1-408-410-00	INDUCTOR	12UH	
L705	1-408-411-00	INDUCTOR	15UH	
L706	1-408-421-00	INDUCTOR	100UH	
L707	1-408-411-00	INDUCTOR	15UH	

<TRANSISTOR>

Q701	8-729-326-11	TRANSISTOR 2SC2611	
Q702	8-729-423-37	TRANSISTOR 2SC3311A-QRS	
Q703	8-729-200-17	TRANSISTOR 2SA1091-O	
Q704	8-729-326-11	TRANSISTOR 2SC2611	
Q705	8-729-423-37	TRANSISTOR 2SC3311A-QRS	
Q706	8-729-200-17	TRANSISTOR 2SA1091-O	
Q707	8-729-200-17	TRANSISTOR 2SA1091-O	
Q708	8-729-326-11	TRANSISTOR 2SC2611	
Q709	8-729-423-37	TRANSISTOR 2SC3311A-QRS	
Q710	8-729-255-12	TRANSISTOR 2SC2551-O	
Q711	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q712	8-729-255-12	TRANSISTOR 2SC2551-O	
Q713	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q714	8-729-200-17	TRANSISTOR 2SA1091-O	
Q715	8-729-200-17	TRANSISTOR 2SA1091-O	
Q716	8-729-200-17	TRANSISTOR 2SA1091-O	

<RESISTOR>

R701	1-216-392-11	METAL OXIDE	1.8	5%	3W	F
R702	1-202-848-00	SOLID	680K	10%	1/2W	
R703	1-202-815-11	SOLID	47K	10%	1/2W	
R704	1-202-846-00	SOLID	470K	10%	1/2W	
R705	1-202-549-00	SOLID	100	10%	1/2W	
R706	1-202-838-00	SOLID	100K	10%	1/2W	
R707	1-202-842-11	SOLID	220K	10%	1/2W	
R708	1-202-818-00	SOLID	1K	10%	1/2W	
R709	1-202-818-00	SOLID	1K	10%	1/2W	
R710	1-202-818-00	SOLID	1K	10%	1/2W	
R711	1-202-837-00	SOLID	82K	10%	1/2W	
R712	1-202-842-11	SOLID	220K	10%	1/2W	
R713	**⚠1-216-486-51**	**METAL OXIDE**	**8.2K**	**5%**	**3W**	**F**
R714	1-249-409-11	CARBON	220	5%	1/4W	
R715	1-202-818-00	SOLID	1K	10%	1/2W	
R716	**⚠1-216-486-51**	**METAL OXIDE**	**8.2K**	**5%**	**3W**	**F**
R717	1-249-409-11	CARBON	220	5%	1/4W	
R718	1-249-409-11	CARBON	220	5%	1/4W	
R720	**⚠1-216-486-51**	**METAL OXIDE**	**8.2K**	**5%**	**3W**	**F**
R721	1-202-842-11	SOLID	220K	10%	1/2W	
R723	1-249-405-11	CARBON	100	5%	1/4W	
R724	1-249-405-11	CARBON	100	5%	1/4W	
R725	1-249-429-11	CARBON	10K	5%	1/4W	
R726	1-249-407-11	CARBON	150	5%	1/4W	
R727	1-249-429-11	CARBON	10K	5%	1/4W	
R728	1-249-407-11	CARBON	150	5%	1/4W	

REF.NO.	PART NO.	DESCRIPTION				REMARK
R729	1-249-405-11	CARBON	100	5%	1/4W	
R730	1-249-407-11	CARBON	150	5%	1/4W	
R731	1-247-704-11	CARBON	220	5%	1/4W	F
R732	1-247-704-11	CARBON	220	5%	1/4W	F
R733	1-247-704-11	CARBON	220	5%	1/4W	F
R739	1-249-433-11	CARBON	22K	5%	1/4W	
R740	1-215-902-11	METAL OXIDE	47K	5%	2W	F
R741	1-249-417-11	CARBON	1K	5%	1/4W	
R742	1-249-429-11	CARBON	10K	5%	1/4W	F
R743	1-249-429-11	CARBON	10K	5%	1/4W	F
R744	1-247-725-11	CARBON	10K	5%	1/4W	F
R745	1-247-713-11	CARBON	1K	5%	1/4W	F
R746	1-215-902-11	METAL OXIDE	47K	5%	1W	F
R747	1-247-725-11	CARBON	10K	5%	1/4W	F
R749	1-249-437-11	CARBON	47K	5%	1/4W	
R750	1-249-409-11	CARBON	220	5%	1/4W	
R751	1-249-397-11	CARBON	22	5%	1/4W	
R752	1-249-397-11	CARBON	22	5%	1/4W	
R753	1-249-397-11	CARBON	22	5%	1/4W	
R757	1-249-418-11	CARBON	1.2K	5%	1/4W	
R777	1-249-441-11	CARBON	100K	5%	1/4W	

<VARIABLE RESISTOR>

RV701	1-230-641-11	RES, ADJ, METAL GLAZE 2.2M
RV702	**⚠1-241-387-11**	**RES, ADJ, METAL GLAZE 110M**

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*A-1345-983-A D BOARD, COMPLETE
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<CAPACITOR>

C1501	1-124-477-11	ELECT	47MF	20%	16V
C1503	1-124-907-11	ELECT	10MF	20%	50V
C1504	1-124-927-11	ELECT	4.7MF	20%	50V
C1505	1-106-379-12	MYLAR	0.033MF	10%	100V
C1506	1-124-903-11	ELECT	1MF	20%	50V
C1507	1-130-481-00	MYLAR	0.0068MF	5%	50V
C1508	1-130-475-00	MYLAR	0.0022MF	5%	50V
C1509	1-136-165-00	FILM	0.1MF	5%	50V
C1510	1-130-483-00	MYLAR	0.01MF	5%	50V
C1511	1-124-477-11	ELECT	47MF	20%	16V
C1512	1-136-161-00	FILM	0.047MF	5%	50V
C1513	1-124-477-11	ELECT	47MF	20%	16V
C1514	1-136-165-00	FILM	0.1MF	5%	50V
C1516	1-162-318-11	CERAMIC	0.001MF	10%	500V
C1517	1-102-129-00	CERAMIC	0.01MF	10%	50V
C1518	1-124-903-11	ELECT	1MF	20%	50V
C1519	1-136-104-00	FILM	0.16MF	5%	200V
C1521	1-102-129-00	CERAMIC	0.01MF	10%	50V
C1522	1-124-360-00	ELECT	1000MF	20%	16V
C1523	1-136-177-00	FILM	1MF	5%	50V
C1524	1-124-927-11	ELECT	4.7MF	20%	50V
C1525	1-136-153-00	FILM	0.01MF	5%	50V
C1526	1-124-477-11	ELECT	47MF	20%	16V
C1527	1-124-477-11	ELECT	47MF	20%	25V
C1528	1-136-153-00	FILM	0.01MF	5%	50V
C1529	1-124-907-11	ELECT	10MF	20%	50V
C1530	1-126-320-11	ELECT	10MF	20%	16V
C1531	1-136-153-00	FILM	0.01MF	5%	50V
C1533	1-124-925-11	ELECT	2.2MF	20%	50V
C1536	1-126-233-11	ELECT	22MF	20%	50V

REF.NO.	PART NO.	DESCRIPTION				REMARK
C1537	1-126-320-11	ELECT	10MF	20%	16V	
C1538	1-124-477-11	ELECT	47MF	20%	16V	
C1539	1-136-165-00	FILM	0.1MF	5%	50V	
C1540	1-136-165-00	FILM	0.1MF	5%	50V	
C1541	1-126-529-11	ELECT	0.47MF	20%	50V	
C1542	1-136-103-00	FILM	0.1MF	5%	200V	
C1543	1-106-228-00	MYLAR	0.22MF	10%	100V	
C1544	1-124-120-11	ELECT	220MF	20%	16V	
C1549	1-124-927-11	ELECT	4.7MF	20%	50V	
C1570	1-124-927-11	ELECT	4.7MF	20%	50V	
C1571	1-124-798-11	ELECT	1MF	20%	160V	

<CONNECTOR>

REF.NO.	PART NO.	DESCRIPTION
D1	*1-564-507-11	PLUG, CONNECTOR 4P
D6	*1-564-506-11	PLUG, CONNECTOR 3P
D84	*1-564-508-11	PLUG, CONNECTOR 5P
D85	*1-560-290-00	PLUG, CONNECTOR (2.5MM PITCH)
DY2	*1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P

<DIODE>

REF.NO.	PART NO.	DESCRIPTION
D1501	8-719-911-19	DIODE 1SS119
D1502	8-719-300-33	DIODE RU-3AM
D1503	8-719-980-78	DIODE ERA83-006
D1504	8-719-980-78	DIODE ERA83-006
D1505	8-719-911-19	DIODE 1SS119
D1506	8-719-911-19	DIODE 1SS119
D1507	8-719-911-19	DIODE 1SS119
D1508	8-719-801-35	THYRISTOR SHOR3D42
D1510	8-719-911-19	DIODE 1SS119
D1511	8-719-911-19	DIODE 1SS119
D1512	8-719-109-68	DIODE RD3.6ES-B1
D1513	8-719-979-85	DIODE EGP20G
D1516	8-719-911-19	DIODE 1SS119
D1517	8-719-979-85	DIODE EGP20G
D1518	8-719-911-19	DIODE 1SS119
D1519	8-719-911-19	DIODE 1SS119

<IC>

REF.NO.	PART NO.	DESCRIPTION
IC1501	8-759-987-16	IC LM393P
IC1502	8-759-982-34	IC RC78M09FA
IC1503	8-759-135-80	IC UPC358C
IC1504	8-759-929-62	IC LM7812CT
IC1505	8-759-135-80	IC UPC358C
IC1506	8-752-052-88	IC CXA1526P

<COIL>

REF.NO.	PART NO.	DESCRIPTION
L1502	1-459-592-11	COIL (WITH CORE) (PMC)
L1503	1-408-247-00	INDUCTOR 33MMH
L1504	1-459-941-12	COIL, CHOKE 3.4MMH
L1505	1-459-104-00	COIL, DUST CORE
L1506	1-459-592-11	COIL (WITH CORE) (PMC)
L1507	1-459-941-12	COIL, CHOKE 3.4MMH

<TRANSISTOR>

REF.NO.	PART NO.	DESCRIPTION
Q1501	8-729-423-37	TRANSISTOR 2SC3311A-QRS
Q1502	8-729-423-37	TRANSISTOR 2SC3311A-QRS
Q1503	8-729-423-44	TRANSISTOR 2SA1309A-QRS
Q1504	8-729-423-37	TRANSISTOR 2SC3311A-QRS
Q1505	8-729-140-96	TRANSISTOR 2SD774-34
Q1507	8-729-423-37	TRANSISTOR 2SC3311A-QRS
Q1508	8-729-140-97	TRANSISTOR 2SB734-34
Q1509	8-729-140-97	TRANSISTOR 2SB734-34
Q1510	8-729-423-37	TRANSISTOR 2SC3311A-QRS
Q1511	8-729-423-44	TRANSISTOR 2SA1309A-QRS
Q1512	8-729-423-37	TRANSISTOR 2SC3311A-QRS
Q1513	8-729-423-37	TRANSISTOR 2SC3311A-QRS
Q1514	8-729-423-37	TRANSISTOR 2SC3311A-QRS
Q1515	8-729-423-44	TRANSISTOR 2SA1309A-QRS
Q1516	8-729-423-37	TRANSISTOR 2SC3311A-QRS
Q1517	8-729-423-44	TRANSISTOR 2SA1309A-QRS
Q1518	8-729-140-96	TRANSISTOR 2SD774-34
Q1519	8-729-140-96	TRANSISTOR 2SD774-34
Q1520	8-729-208-72	TRANSISTOR 2SC3298B-Y

<RESISTOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
R1501	1-249-409-11	CARBON	220	5%	1/4W	
R1502	1-249-409-11	CARBON	220	5%	1/4W	
R1504	1-215-892-11	METAL OXIDE	1K	5%	2W	F
R1505	1-249-417-11	CARBON	1K	5%	1/4W	
R1506	1-249-423-11	CARBON	3.3K	5%	1/4W	
R1507	1-249-410-11	CARBON	270	5%	1/4W	
R1508	1-249-437-11	CARBON	47K	5%	1/4W	
R1509	1-249-429-11	CARBON	10K	5%	1/4W	
R1510	1-215-461-00	METAL	47K	1%	1/4W	
R1511	1-249-429-11	CARBON	10K	5%	1/4W	
R1512	1-249-421-11	CARBON	2.2K	5%	1/4W	
R1513	1-249-435-11	CARBON	33K	5%	1/4W	
R1514	1-249-429-11	CARBON	10K	5%	1/4W	
R1515	1-249-421-11	CARBON	2.2K	5%	1/4W	
R1516	1-249-421-11	CARBON	2.2K	5%	1/4W	
R1517	1-249-425-11	CARBON	4.7K	5%	1/4W	
R1518	1-249-429-11	CARBON	10K	5%	1/4W	
R1519	1-249-441-11	CARBON	100K	5%	1/4W	
R1520	1-249-429-11	CARBON	10K	5%	1/4W	
R1521	1-249-441-11	CARBON	100K	5%	1/4W	
R1522	1-249-427-11	CARBON	6.8K	5%	1/4W	
R1523	1-249-435-11	CARBON	33K	5%	1/4W	
R1524	1-249-421-11	CARBON	2.2K	5%	1/4W	
R1525	1-249-423-11	CARBON	3.3K	5%	1/4W	
R1526	1-249-435-11	CARBON	33K	5%	1/4W	
R1527	1-247-713-11	CARBON	1K	5%	1/4W	F
R1528	1-249-438-11	CARBON	56K	5%	1/4W	
R1529	1-249-434-11	CARBON	27K	5%	1/4W	
R1531	1-249-429-11	CARBON	10K	5%	1/4W	
R1532	1-216-379-11	METAL OXIDE	6.8	5%	2W	F
R1533	1-249-417-11	CARBON	1K	5%	1/4W	
R1534	1-249-423-11	CARBON	3.3K	5%	1/4W	
R1535	1-249-425-11	CARBON	4.7K	5%	1/4W	
R1536	1-215-857-11	METAL OXIDE	10	5%	1W	F
R1537	1-249-404-00	CARBON	82	5%	1/4W	
R1538	1-216-379-11	METAL OXIDE	6.8	5%	2W	F
R1539	1-215-875-11	METAL OXIDE	10K	5%	1W	F
R1540	1-249-413-11	CARBON	470	5%	1/4W	
R1541	1-249-441-11	CARBON	100K	5%	1/4W	
R1542	1-249-423-11	CARBON	3.3K	5%	1/4W	
R1543	1-249-414-11	CARBON	560	5%	1/4W	
R1544	1-249-417-11	CARBON	1K	5%	1/4W	
R1545	1-249-411-11	CARBON	330	5%	1/4W	
R1546	1-215-887-00	METAL OXIDE	150	5%	2W	F
R1548	1-249-441-11	CARBON	100K	5%	1/4W	
R1552	1-249-426-11	CARBON	5.6K	5%	1/4W	

REF.NO.	PART NO.	DESCRIPTION				REMARK
R1553	1-215-883-11	METAL OXIDE	33	5%	2W	F
R1554	1-249-393-11	CARBON	10	5%	1/4W	
R1555	1-215-883-11	METAL OXIDE	33	5%	2W	F
R1556	1-249-438-11	CARBON	56K	5%	1/4W	
R1557	1-249-421-11	CARBON	2.2K	5%	1/4W	
R1558	1-249-425-11	CARBON	4.7K	5%	1/4W	
R1559	1-249-429-11	CARBON	10K	5%	1/4W	
R1560	1-247-889-00	CARBON	270K	5%	1/4W	
R1561	1-249-429-11	CARBON	10K	5%	1/4W	
R1562	1-249-423-11	CARBON	3.3K	5%	1/4W	
R1564	1-249-437-11	CARBON	47K	5%	1/4W	
R1565	1-249-437-11	CARBON	47K	5%	1/4W	
R1566	1-249-432-11	CARBON	18K	5%	1/4W	
R1567	1-216-447-00	METAL OXIDE	27	5%	2W	F
R1568	1-249-415-11	CARBON	680	5%	1/4W	
R1569	1-215-481-00	METAL	330K	1%	1/4W	
R1570	1-249-433-11	CARBON	22K	5%	1/4W	
R1571	1-249-423-11	CARBON	3.3K	5%	1/4W	
R1572	1-249-419-11	CARBON	1.5K	5%	1/4W	
R1573	1-249-433-11	CARBON	22K	5%	1/4W	
R1574	1-249-429-11	CARBON	10K	5%	1/4W	
R1575	1-249-429-11	CARBON	10K	5%	1/4W	
R1576	1-215-475-00	METAL	180K	1%	1/4W	
R1578	1-249-437-11	CARBON	47K	5%	1/4W	
R1579	1-249-421-11	CARBON	2.2K	5%	1/4W	
R1580	1-249-427-11	CARBON	6.8K	5%	1/4W	
R1581	1-249-433-11	CARBON	22K	5%	1/4W	
R1582	1-249-417-11	CARBON	1K	5%	1/4W	
R1583	1-249-429-11	CARBON	10K	5%	1/4W	
R1584	1-249-405-11	CARBON	100	5%	1/4W	
R1585	1-249-429-11	CARBON	10K	5%	1/4W	
R1586	1-247-895-00	CARBON	470K	5%	1/4W	
R1587	1-249-432-11	CARBON	18K	5%	1/4W	
R1588	1-249-429-11	CARBON	10K	5%	1/4W	
R1594	1-216-452-11	METAL OXIDE	180	5%	2W	F
R1598	1-216-447-00	METAL OXIDE	27	5%	2W	F
R1601	⚠1-216-450-91	METAL OXIDE	[illegible]	5%	2W	F
R1603	⚠1-216-375-91	METAL OXIDE	3.3	5%	2W	F
R1604	1-249-439-11	CARBON	68K	5%	1/4W	
R1605	1-249-434-11	CARBON	27K	5%	1/4W	
R1606	⚠1-215-885-91	METAL OXIDE	[illegible]	5%	2W	F

<VARIABLE RESISTOR>

RV1507 1-238-552-11 RES, ADJ, CARBON 470K

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*A-1347-039-A V BOARD, COMPLETE
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*4-376-533-01 CASE (MAIN), SHIELD
*4-376-535-01 CASE (BOTTOM), SHIELD

<CAPACITOR>

REF.NO.	PART NO.	DESCRIPTION			REMARK
C1104	1-102-125-00	CERAMIC	0.0047MF	10%	50V
C1105	1-126-101-11	ELECT	100MF	20%	16V
C1106	1-102-125-00	CERAMIC	0.0047MF	10%	50V
C1107	1-126-101-11	ELECT	100MF	20%	16V
C1108	1-101-888-00	CERAMIC	68PF	5%	50V
C1112	1-102-816-00	CERAMIC	120PF	5%	50V
C1113	1-102-973-00	CERAMIC	100PF	5%	50V
C1114	1-106-355-12	MYLAR	0.0033MF	10%	100V
C1115	1-102-973-00	CERAMIC	100PF	5%	50V
C1117	1-124-903-11	ELECT	1MF	20%	50V
C1118	1-106-367-00	MYLAR	0.01MF	10%	100V
C1119	1-102-816-00	CERAMIC	120PF	5%	50V
C1123	1-126-101-11	ELECT	100MF	20%	16V
C1124	1-101-004-00	CERAMIC	0.01MF		50V
C1125	1-101-888-00	CERAMIC	68PF	5%	50V
C1126	1-102-935-00	CERAMIC	2PF	0.25PF	50V
C1127	1-102-943-00	CERAMIC	6PF	1PF	50V
C1131	1-124-034-51	ELECT	33MF	20%	16V
C1133	1-126-101-11	ELECT	100MF	20%	16V
C1134	1-101-004-00	CERAMIC	0.01MF		50V
C1135	1-124-034-51	ELECT	33MF	20%	16V
C1136	1-101-004-00	CERAMIC	0.01MF		50V
C1137	1-101-004-00	CERAMIC	0.01MF		50V
C1138	1-124-034-51	ELECT	33MF	20%	16V
C1139	1-101-004-00	CERAMIC	0.01MF		50V
C1140	1-101-004-00	CERAMIC	0.01MF		50V
C1141	1-106-383-00	MYLAR	0.047MF	10%	100V
C1143	1-124-902-00	ELECT	0.47MF	20%	50V
C1144	1-101-004-00	CERAMIC	0.01MF		50V
C1145	1-124-927-11	ELECT	4.7MF	20%	50V
C1146	1-124-927-11	ELECT	4.7MF	20%	50V
C1149	1-101-004-00	CERAMIC	0.01MF		50V
C1150	1-106-359-00	MYLAR	0.0047MF	10%	100V
C1151	1-124-907-11	ELECT	10MF	20%	50V
C1152	1-124-034-51	ELECT	33MF	20%	16V
C1153	1-101-004-00	CERAMIC	0.01MF		50V
C1154	1-124-034-51	ELECT	33MF	20%	16V
C1155	1-124-902-00	ELECT	0.47MF	20%	50V
C1156	1-124-034-51	ELECT	33MF	20%	16V
C1157	1-124-034-51	ELECT	33MF	20%	16V
C1158	1-102-111-00	CERAMIC	270PF	10%	50V
C1159	1-126-101-11	ELECT	100MF	20%	16V
C1160	1-102-947-00	CERAMIC	10PF	0.5PF	50V
C1161	1-102-074-00	CERAMIC	0.001MF	10%	50V
C1162	1-124-034-51	ELECT	33MF	20%	16V

<NETWORK>

REF.NO.	PART NO.	DESCRIPTION
CP1101	1-236-176-11	NETWORK, RES, THICK FILM
CP1102	1-236-176-11	NETWORK, RES, THICK FILM
CP1103	1-236-176-11	NETWORK, RES, THICK FILM

<DIODE>

REF.NO.	PART NO.	DESCRIPTION
D1101	8-713-300-57	DIODE 1T33
D1102	8-713-300-57	DIODE 1T33

<FILTER>

REF.NO.	PART NO.	DESCRIPTION
FL1101	1-236-129-11	ENCAPSULATED COMPONENT
FL1103	1-236-129-11	ENCAPSULATED COMPONENT
FL1109	1-236-129-11	ENCAPSULATED COMPONENT
FL1110	1-236-129-11	ENCAPSULATED COMPONENT
FL1111	1-236-164-11	ENCAPSULATED COMPONENT
FL1116	1-236-071-11	ENCAPSULATED COMPONENT
FL1120	1-236-164-11	ENCAPSULATED COMPONENT
FL1121	1-236-129-11	ENCAPSULATED COMPONENT
FL1129	1-236-163-11	ENCAPSULATED COMPONENT
FL1130	1-236-163-11	ENCAPSULATED COMPONENT
FL1132	1-236-071-11	ENCAPSULATED COMPONENT
FL1144	1-236-129-11	ENCAPSULATED COMPONENT
FL1147	1-236-163-11	ENCAPSULATED COMPONENT
FL1148	1-236-163-11	ENCAPSULATED COMPONENT

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une trame et par une marque ⚠ sont d'une importance critique pour la sécurité. Ne les remplacer que par des pièces de numéro spécifié.

<IC>

REF.NO.	PART NO.	DESCRIPTION	REMARK
IC1101	8-752-332-83	IC CXD1220AQ	
IC1102	8-759-925-74	IC SN74HC04ANS	
IC1103	8-759-925-74	IC SN74HC04ANS	
IC1104	8-759-605-15	IC M5M4C500L-10	
IC1105	8-759-605-15	IC M5M4C500L-10	
IC1106	8-759-605-15	IC M5M4C500L-10	
IC1107	8-759-605-14	IC M52678P	
IC1108	8-759-605-14	IC M52678P	
IC1109	8-759-011-65	IC MC74HC4053F	

<COIL>

REF.NO.	PART NO.	DESCRIPTION		REMARK
L1101	1-410-663-31	INDUCTOR	10UH	
L1102	1-410-645-31	INDUCTOR	100UH	
L1103	1-410-677-31	INDUCTOR	180UH	
L1104	1-410-663-31	INDUCTOR	10UH	
L1105	1-410-663-31	INDUCTOR	10UH	
L1106	1-410-680-31	INDUCTOR	330UH	
L1107	1-410-663-31	INDUCTOR	10UH	

<TRANSISTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
Q1101	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q1102	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q1103	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q1104	8-729-119-78	TRANSISTOR 2SC2785-HFE	

<RESISTOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
R1101	1-249-417-11	CARBON	1K	5%	1/4W	
R1102	1-249-417-11	CARBON	1K	5%	1/4W	
R1103	1-249-417-11	CARBON	1K	5%	1/4W	
R1104	1-249-423-11	CARBON	3.3K	5%	1/4W	
R1105	1-249-419-11	CARBON	1.5K	5%	1/4W	
R1106	1-249-409-11	CARBON	220	5%	1/4W	
R1107	1-249-417-11	CARBON	1K	5%	1/4W	
R1108	1-249-417-11	CARBON	1K	5%	1/4W	
R1109	1-249-417-11	CARBON	1K	5%	1/4W	
R1110	1-249-439-11	CARBON	68K	5%	1/4W	
R1111	1-249-417-11	CARBON	1K	5%	1/4W	
R1112	1-249-438-11	CARBON	56K	5%	1/4W	
R1113	1-249-441-11	CARBON	100K	5%	1/4W	
R1114	1-249-417-11	CARBON	1K	5%	1/4W	
R1115	1-249-421-11	CARBON	2.2K	5%	1/4W	
R1116	1-249-431-11	CARBON	15K	5%	1/4W	
R1117	1-249-438-11	CARBON	56K	5%	1/4W	
R1118	1-249-441-11	CARBON	100K	5%	1/4W	
R1119	1-249-439-11	CARBON	68K	5%	1/4W	
R1120	1-249-409-11	CARBON	220	5%	1/4W	
R1121	1-249-409-11	CARBON	220	5%	1/4W	
R1122	1-249-417-11	CARBON	1K	5%	1/4W	
R1123	1-249-423-11	CARBON	3.3K	5%	1/4W	
R1124	1-249-431-11	CARBON	15K	5%	1/4W	
R1125	1-249-417-11	CARBON	1K	5%	1/4W	
R1126	1-249-423-11	CARBON	3.3K	5%	1/4W	
R1127	1-249-431-11	CARBON	15K	5%	1/4W	
R1128	1-249-417-11	CARBON	1K	5%	1/4W	
R1129	1-249-423-11	CARBON	3.3K	5%	1/4W	
R1130	1-249-431-11	CARBON	15K	5%	1/4W	
R1131	1-249-417-11	CARBON	1K	5%	1/4W	
R1133	1-249-417-11	CARBON	1K	5%	1/4W	
R1134	1-215-432-00	METAL	3K	1%	1/4W	
R1135	1-249-437-11	CARBON	47K	5%	1/4W	
R1137	1-249-401-11	CARBON	47	5%	1/4W	
R1140	1-249-427-11	CARBON	6.8K	5%	1/4W	

<TRANSFORMER>

REF.NO.	PART NO.	DESCRIPTION	REMARK
T1101	1-404-607-11	COIL	
T1102	1-404-607-11	COIL	

<CONNECTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
V1	*1-566-057-11	PIN, CONNECTOR 5P	
V2	*1-566-061-11	PIN, CONNECTOR 9P	
V3	*1-566-060-11	PIN, CONNECTOR 8P	

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*1-638-780-11 H7 BOARD
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*4-348-208-00 HOLDER, LED

<CAPACITOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
C51	1-124-584-00	ELECT	100MF	20%	10V	
C52	1-126-160-11	ELECT	1MF	20%	50V	
C53	1-124-465-00	ELECT	0.47MF	20%	50V	

<DIODE>

REF.NO.	PART NO.	DESCRIPTION	REMARK
D4	8-719-911-19	DIODE 1SS119	
D8	8-719-911-19	DIODE 1SS119	
D52	8-719-812-41	DIODE TLR124	
D53	8-719-812-41	DIODE TLR124	
D54	8-719-911-19	DIODE 1SS119	

<CONNECTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
H11	*1-564-525-11	PLUG, CONNECTOR 10P	
H12	*1-564-524-11	PLUG, CONNECTOR 9P	

<IC>

REF.NO.	PART NO.	DESCRIPTION	REMARK
IC51	8-741-148-33	IC SBX1483-59	

<RESISTOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
R51	1-249-405-11	CARBON	100	5%	1/4W	
R52	1-249-405-11	CARBON	100	5%	1/4W	
R53	1-249-409-11	CARBON	220	5%	1/4W	
R54	1-249-437-11	CARBON	47K	5%	1/4W	

<SWITCH>

REF.NO.	PART NO.	DESCRIPTION	REMARK
S51	⚠1-572-198-11	SWITCH, KEYBOARD (POWER)	
S52	1-572-198-11	SWITCH, KEYBOARD	
S53	1-572-198-11	SWITCH, KEYBOARD	
S54	1-572-198-11	SWITCH, KEYBOARD	
S55	1-572-198-11	SWITCH, KEYBOARD	
S56	1-572-198-11	SWITCH, KEYBOARD	

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*A-1371-733-A W BOARD, COMPLETE
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REF.NO.	PART NO.	DESCRIPTION				REMARK
		<CAPACITOR>				
C2752	1-164-085-11	CERAMIC	0.001MF	10%	50V	
C2753	1-124-925-11	ELECT	2.2MF	20%	50V	
C2754	1-164-079-11	CERAMIC	330PF	10%	50V	
C2761	1-161-830-00	CERAMIC	0.0047MF		500V	
C2762	1-164-054-11	CERAMIC	22PF	5%	50V	
C2763	1-123-935-00	ELECT	33MF	20%	160V	
C2764	1-124-120-11	ELECT	220MF	20%	16V	
C2766	1-164-066-11	CERAMIC	68PF	5%	50V	
C2767	1-102-244-00	CERAMIC	220PF	10%	500V	
C2768	1-106-383-00	MYLAR	0.047MF		200V	
C2769	1-124-799-11	ELECT	2.2MF	20%	160V	
C2770	1-106-391-12	MYLAR	0.1MF	10%	200V	
C2771	1-124-907-11	ELECT	10MF	20%	50V	
C2772	1-126-101-11	ELECT	100MF	20%	16V	
C2773	1-106-383-00	MYLAR	0.047MF		200V	
C2774	1-164-064-11	CERAMIC	56PF	5%	50V	
C2775	1-124-120-11	ELECT	220MF	20%	16V	
C2776	1-124-907-11	ELECT	10MF	20%	50V	
C2778	1-164-085-11	CERAMIC	0.001MF	10%	50V	
C2779	1-164-085-11	CERAMIC	0.001MF	10%	50V	
C2780	1-124-907-11	ELECT	10MF	20%	50V	
		<DIODE>				
D2761	8-719-911-19	DIODE 1SS119				
D2763	8-719-911-19	DIODE 1SS119				
D2764	8-719-911-19	DIODE 1SS119				
D2765	8-719-911-19	DIODE 1SS119				
D2766	8-719-911-19	DIODE 1SS119				
D2767	8-719-110-90	DIODE RD39ES-B4				
D2768	8-719-110-90	DIODE RD39ES-B4				
		<COIL>				
L2762	1-408-418-00	INDUCTOR	56UH			
L2763	1-408-417-00	INDUCTOR	47UH			
		<TRANSISTOR>				
Q2761	8-729-423-37	TRANSISTOR 2SC3311A-QRS				
Q2762	8-729-423-44	TRANSISTOR 2SA1309A-QRS				
Q2763	8-729-208-39	TRANSISTOR 2SA1306A-Y				
Q2764	8-729-423-37	TRANSISTOR 2SC3311A-QRS				
Q2765	8-729-208-72	TRANSISTOR 2SC3298B-Y				
Q2766	8-729-423-37	TRANSISTOR 2SC3311A-QRS				
Q2767	8-729-140-96	TRANSISTOR 2SD774-34				
Q2768	8-729-423-37	TRANSISTOR 2SC3311A-QRS				
		<RESISTOR>				
R2751	1-249-429-11	CARBON	10K	5%	1/4W	
R2752	1-249-432-11	CARBON	18K	5%	1/4W	
R2753	1-249-437-11	CARBON	47K	5%	1/4W	
R2761	1-249-397-11	CARBON	22	5%	1/4W	F
R2762	1-249-409-11	CARBON	220	5%	1/4W	
R2763	1-249-420-11	CARBON	1.8K	5%	1/4W	
R2764	1-247-736-11	CARBON	56	5%	1/2W	F
R2765	1-249-414-11	CARBON	560	5%	1/4W	F
R2766	1-249-418-11	CARBON	1.2K	5%	1/4W	
R2768	1-249-420-11	CARBON	1.8K	5%	1/4W	
R2769	1-249-385-11	CARBON	2.2	5%	1/4W	F
R2770	1-249-435-11	CARBON	33K	5%	1/4W	
R2771	1-249-427-11	CARBON	6.8K	5%	1/4W	
R2774	1-215-886-11	METAL OXIDE	100	5%	2W	F
R2775	1-249-417-11	CARBON	1K	5%	1/4W	F
R2776	1-249-432-11	CARBON	18K	5%	1/4W	
R2777	1-249-438-11	CARBON	56K	5%	1/4W	
R2778	1-249-429-11	CARBON	10K	5%	1/4W	
R2779	1-249-414-11	CARBON	560	5%	1/4W	
R2780	1-249-419-11	CARBON	1.5K	5%	1/4W	
R2781	1-249-410-11	CARBON	270	5%	1/4W	
R2782	1-249-385-11	CARBON	2.2	5%	1/4W	F
R2783	1-249-441-11	CARBON	100K	5%	1/4W	
R2784	1-249-405-11	CARBON	100	5%	1/4W	
R2785	1-249-402-11	CARBON	56	5%	1/4W	F
R2786	1-249-436-11	CARBON	39K	5%	1/4W	
R2787	1-249-432-11	CARBON	18K	5%	1/4W	
R2788	1-249-417-11	CARBON	1K	5%	1/4W	
R2789	1-249-417-11	CARBON	1K	5%	1/4W	
R2790	1-216-451-11	METAL OXIDE	120	5%	2W	F
R2791	1-249-412-11	CARBON	390	5%	1/4W	
R2792	1-216-450-00	METAL OXIDE	82	5%	2W	F
		<CONNECTOR>				
W1	*1-564-507-11	PLUG, CONNECTOR 4P				
W2	*1-564-507-11	PLUG, CONNECTOR 4P				

****

*1-638-781-11 Y1 BOARD
****

REF.NO.	PART NO.	DESCRIPTION
		<CONNECTOR>
Y1-25	*1-565-509-11	CONNECTOR, BOARD TO BOARD 18P
Y1-72	*1-564-525-11	PLUG, CONNECTOR 10P
Y1-73	*1-564-521-11	PLUG, CONNECTOR 6P

****

*1-638-779-11 Y BOARD
****

REF.NO.	PART NO.	DESCRIPTION				REMARK
		<CAPACITOR>				
C900	1-124-927-11	ELECT	4.7MF	20%	50V	
C901	1-126-101-11	ELECT	100MF	20%	16V	
C903	1-124-907-11	ELECT	10MF	20%	50V	
C904	1-124-927-11	ELECT	4.7MF	20%	50V	
C905	1-126-101-11	ELECT	100MF	20%	16V	
C906	1-124-907-11	ELECT	10MF	20%	50V	
C907	1-126-101-11	ELECT	100MF	20%	16V	
C908	1-126-101-11	ELECT	100MF	20%	16V	
C909	1-136-165-00	FILM	0.1MF	5%	50V	
C910	1-136-155-00	FILM	0.015MF	5%	50V	
C911	1-130-479-00	MYLAR	0.0047MF	5%	50V	
C912	1-124-907-11	ELECT	10MF	20%	50V	
C913	1-136-165-00	FILM	0.1MF	5%	50V	
C914	1-130-479-00	MYLAR	0.0047MF	5%	50V	
C915	1-136-155-00	FILM	0.015MF	5%	50V	
C916	1-126-101-11	ELECT	100MF	20%	16V	
C921	1-136-165-00	FILM	0.1MF	5%	50V	

<DIODE>

Les composants identifiés par une trame et par une marque ⚠ sont d'une importance critique pour la sécurité. Ne les remplacer que par des pièces de numéro spécifié.

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION				REMARK
D900	8-719-109-86	DIODE RD5.1ES-B3				
D901	8-719-911-19	DIODE 1SS119				

<IC>

REF.NO.	PART NO.	DESCRIPTION	REMARK
IC900	8-759-945-58	IC RC4558P	
IC901	8-759-945-58	IC RC4558P	
IC903	8-759-932-33	IC BU4066B	

<TRANSISTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
Q900	8-729-423-37	TRANSISTOR 2SC3311A-QRS	
Q903	8-729-900-89	TRANSISTOR DTC144ES	

<RESISTOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
R900	1-249-429-11	CARBON	10K	5%	1/4W	
R901	1-249-421-11	CARBON	2.2K	5%	1/4W	
R902	1-249-417-11	CARBON	1K	5%	1/4W	
R903	1-249-429-11	CARBON	10K	5%	1/4W	
R904	1-247-895-00	CARBON	470K	5%	1/4W	
R905	1-247-895-00	CARBON	470K	5%	1/4W	
R906	1-215-451-00	METAL	18K	1%	1/4W	
R907	1-249-441-11	CARBON	100K	5%	1/4W	
R908	1-249-441-11	CARBON	100K	5%	1/4W	
R909	1-215-453-00	METAL	22K	1%	1/4W	
R910	1-249-440-11	CARBON	82K	5%	1/4W	
R911	1-249-429-11	CARBON	10K	5%	1/4W	
R912	1-247-903-00	CARBON	1M	5%	1/4W	
R913	1-249-429-11	CARBON	10K	5%	1/4W	
R914	1-249-405-11	CARBON	100	5%	1/4W	
R915	1-249-429-11	CARBON	10K	5%	1/4W	
R916	1-249-429-11	CARBON	10K	5%	1/4W	
R917	1-249-429-11	CARBON	10K	5%	1/4W	
R918	1-249-441-11	CARBON	100K	5%	1/4W	
R919	1-249-405-11	CARBON	100	5%	1/4W	
R920	1-249-418-11	CARBON	1.2K	5%	1/4W	
R921	1-247-887-00	CARBON	220K	5%	1/4W	
R922	1-249-441-11	CARBON	100K	5%	1/4W	
R923	1-247-887-00	CARBON	220K	5%	1/4W	
R924	1-249-428-11	CARBON	8.2K	5%	1/4W	
R925	1-249-417-11	CARBON	1K	5%	1/4W	
R926	1-249-405-11	CARBON	100	5%	1/4W	
R927	1-249-429-11	CARBON	10K	5%	1/4W	
R928	1-215-451-00	METAL	18K	1%	1/4W	
R929	1-215-435-00	METAL	3.9K	1%	1/4W	
R930	1-215-435-00	METAL	3.9K	1%	1/4W	
R931	1-215-453-00	METAL	22K	1%	1/4W	
R932	1-215-435-00	METAL	3.9K	1%	1/4W	
R933	1-215-455-00	METAL	27K	1%	1/4W	
R934	1-215-453-00	METAL	22K	1%	1/4W	
R935	1-215-435-00	METAL	3.9K	1%	1/4W	
R936	1-215-455-00	METAL	27K	1%	1/4W	
R937	1-215-453-00	METAL	22K	1%	1/4W	
R938	1-249-428-11	CARBON	8.2K	5%	1/4W	

<CONNECTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
Y25	*1-565-494-11	CONNECTOR, BOARD TO BOARD 18P	
Y75	*1-560-125-00	PLUG, CONNECTOR (2.5MM PITCH)	

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*A-1385-104-A K BOARD, COMPLETE

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*4-341-752-01 EYELET (EY2451-EY2458)

<CAPACITOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
C2451	1-136-161-00	FILM	0.047MF	5%	50V	
C2452	1-136-161-00	FILM	0.047MF	5%	50V	
C2453	1-126-096-11	ELECT	10MF	20%	35V	
C2454	1-124-907-11	ELECT	10MF	20%	50V	
C2456	1-130-475-00	MYLAR	0.0022MF	5%	50V	
C2457	1-124-925-11	ELECT	2.2MF	20%	50V	
C2458	1-124-618-11	ELECT	2200MF	20%	35V	
C2461	1-124-925-11	ELECT	2.2MF	20%	50V	
C2465	1-130-475-00	MYLAR	0.0022MF	5%	50V	
C2466	1-124-925-11	ELECT	2.2MF	20%	50V	
C2469	1-124-925-11	ELECT	2.2MF	20%	50V	
C2470	1-126-233-11	ELECT	22MF	20%	50V	
C2471	1-124-903-11	ELECT	1MF	20%	50V	
C2472	1-124-618-11	ELECT	2200MF	20%	35V	
C2473	1-124-484-11	ELECT	220MF	20%	35V	
C2474	1-124-484-11	ELECT	220MF	20%	35V	
C2475	1-136-165-00	FILM	0.1MF	5%	50V	
C2476	1-136-165-00	FILM	0.1MF	5%	50V	
C2477	1-124-618-11	ELECT	2200MF	20%	35V	
C2478	1-126-233-11	ELECT	22MF	20%	50V	
C2479	1-124-903-11	ELECT	1MF	20%	50V	
C2480	1-124-484-11	ELECT	220MF	20%	35V	
C2481	1-124-484-11	ELECT	220MF	20%	35V	
C2482	1-124-618-11	ELECT	2200MF	20%	35V	
C2483	1-124-618-11	ELECT	2200MF	20%	35V	
C2484	1-136-165-00	FILM	0.1MF	5%	50V	
C2485	1-136-165-00	FILM	0.1MF	5%	50V	
C2486	1-124-925-11	ELECT	2.2MF	20%	50V	
C2487	1-124-925-11	ELECT	2.2MF	20%	50V	

<DIODE>

REF.NO.	PART NO.	DESCRIPTION	REMARK
D2451	8-719-911-19	DIODE 1SS119	
D2452	8-719-911-19	DIODE 1SS119	

<IC>

REF.NO.	PART NO.	DESCRIPTION	REMARK
IC2451	⚠8-759-980-43	IC TDA2009A	
IC2452	⚠8-759-980-43	IC TDA2009A	

<CONNECTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
K1	*1-560-123-00	PLUG, CONNECTOR (2.5MM) 3P	
K2	*1-560-123-00	PLUG, CONNECTOR (2.5MM PITCH)	
K13	*1-565-494-11	CONNECTOR, BOARD TO BOARD 18P	
K27	*1-564-517-11	PLUG, CONNECTOR 2P	
K28	*1-564-518-11	PLUG, CONNECTOR 3P	
K64	*1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P	

<IC LINK>

REF.NO.	PART NO.	DESCRIPTION	REMARK
PS2401	⚠1-532-984-11	LINK, IC 2A	
PS2402	⚠1-532-984-11	LINK, IC 2A	

<TRANSISTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
Q2451	8-729-423-37	TRANSISTOR 2SC3311A-QRS	
Q2452	8-729-423-37	TRANSISTOR 2SC3311A-QRS	

REF.NO.	PART NO.	DESCRIPTION				REMARK
Q2455	8-729-423-37	TRANSISTOR	2SC3311A-QRS			
Q2456	8-729-423-44	TRANSISTOR	2SA1309A-QRS			
Q2457	8-729-119-78	TRANSISTOR	2SC2785-HFE			
Q2458	8-729-423-44	TRANSISTOR	2SA1309A-QRS			

<RESISTOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
R2424	1-215-421-00	METAL	1K	1%	1/4W	
R2425	1-215-409-00	METAL	330	1%	1/4W	
R2426	1-215-409-00	METAL	330	1%	1/4W	
R2427	1-215-421-00	METAL	1K	1%	1/4W	
R2439	1-249-441-11	CARBON	100K	5%	1/4W	
R2440	1-249-413-11	CARBON	470	5%	1/4W	
R2441	1-249-435-11	CARBON	33K	5%	1/4W	
R2442	1-249-441-11	CARBON	100K	5%	1/4W	
R2443	1-249-413-11	CARBON	470	5%	1/4W	
R2444	1-249-430-11	CARBON	12K	5%	1/4W	
R2445	1-249-430-11	CARBON	12K	5%	1/4W	
R2446	1-249-441-11	CARBON	100K	5%	1/4W	
R2447	1-249-439-11	CARBON	68K	5%	1/4W	
R2451	1-249-441-11	CARBON	100K	5%	1/4W	
R2452	1-249-441-11	CARBON	100K	5%	1/4W	
R2453	1-249-405-11	CARBON	100	5%	1/4W	
R2454	1-215-437-00	METAL	4.7K	1%	1/4W	
R2455	1-215-427-00	METAL	1.8K	1%	1/4W	
R2456	1-249-441-11	CARBON	100K	5%	1/4W	
R2457	1-249-441-11	CARBON	100K	5%	1/4W	
R2458	1-249-405-11	CARBON	100	5%	1/4W	
R2459	1-249-421-11	CARBON	2.2K	5%	1/4W	
R2460	1-249-421-11	CARBON	2.2K	5%	1/4W	
R2463	1-249-435-11	CARBON	33K	5%	1/4W	
R2464	1-249-441-11	CARBON	100K	5%	1/4W	
R2465	1-215-423-00	METAL	1.2K	1%	1/4W	
R2466	1-215-417-00	METAL	680	1%	1/4W	
R2468	1-215-387-00	METAL	39	1%	1/4W	
R2469	1-215-387-00	METAL	39	1%	1/4W	
R2470	△1-249-389-91	CARBON	4.7	5%	1/4W	F
R2471	△1-249-389-91	CARBON	4.7	5%	1/4W	F
R2473	1-249-421-11	CARBON	2.2K	5%	1/4W	
R2474	1-249-421-11	CARBON	2.2K	5%	1/4W	
R2483	1-215-437-00	METAL	4.7K	1%	1/4W	
R2484	1-215-427-00	METAL	1.8K	1%	1/4W	
R2487	1-249-430-11	CARBON	12K	5%	1/4W	
R2488	1-249-430-11	CARBON	12K	5%	1/4W	
R2489	1-215-423-00	METAL	1.2K	1%	1/4W	
R2491	1-215-387-00	METAL	39	1%	1/4W	
R2492	1-215-417-00	METAL	680	1%	1/4W	
R2493	1-215-387-00	METAL	39	1%	1/4W	
R2494	△1-249-389-91	CARBON	4.7	5%	1/4W	F
R2495	△1-249-389-91	CARBON	4.7	5%	1/4W	F
R2497	1-249-421-11	CARBON	2.2K	5%	1/4W	
R2498	1-249-421-11	CARBON	2.2K	5%	1/4W	

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A-1394-281-A U BOARD, COMPLETE
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*4-341-752-01 EYELET (EY1-EY5)

<CAPACITOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
C401	1-126-233-11	ELECT	22MF	20%	25V	
C402	1-101-004-00	CERAMIC	0.01MF		50V	
C403	1-124-903-11	ELECT	1MF	20%	50V	
C404	1-124-903-11	ELECT	1MF	20%	50V	
C405	1-126-233-11	ELECT	22MF	20%	25V	
C407	1-124-903-11	ELECT	1MF	20%	50V	
C408	1-124-903-11	ELECT	1MF	20%	50V	
C409	1-126-233-11	ELECT	22MF	20%	25V	
C410	1-124-907-11	ELECT	10MF	20%	50V	
C411	1-126-233-11	ELECT	22MF	20%	25V	
C413	1-124-903-11	ELECT	1MF	20%	50V	
C414	1-124-903-11	ELECT	1MF	20%	50V	
C415	1-126-233-11	ELECT	22MF	20%	25V	
C418	1-124-478-11	ELECT	100MF	20%	25V	
C419	1-124-478-11	ELECT	100MF	20%	25V	
C420	1-124-477-11	ELECT	47MF	20%	16V	
C421	1-126-103-11	ELECT	470MF	20%	16V	
C422	1-126-103-11	ELECT	470MF	20%	16V	
C423	1-101-004-00	CERAMIC	0.01MF		50V	
C424	1-126-233-11	ELECT	22MF	20%	25V	
C425	1-126-233-11	ELECT	22MF	20%	25V	
C426	1-124-589-11	ELECT	47MF	20%	16V	
C427	1-102-125-00	CERAMIC	0.0047MF	10%	50V	
C428	1-126-233-11	ELECT	22MF	20%	25V	
C429	1-124-589-11	ELECT	47MF	20%	16V	
C430	1-126-233-11	ELECT	22MF	20%	25V	
C431	1-124-478-11	ELECT	100MF	20%	25V	
C433	1-126-233-11	ELECT	22MF	20%	25V	
C434	1-126-233-11	ELECT	22MF	20%	25V	
C435	1-124-903-11	ELECT	1MF	20%	50V	
C436	1-124-903-11	ELECT	1MF	20%	50V	
C437	1-126-233-11	ELECT	22MF	20%	25V	
C438	1-124-598-11	ELECT	22MF	20%	25V	
C439	1-126-233-11	ELECT	22MF	20%	25V	
C440	1-124-477-11	ELECT	47MF	20%	16V	
C441	1-124-477-11	ELECT	47MF	20%	16V	
C442	1-126-233-11	ELECT	22MF	20%	25V	
C445	1-124-589-11	ELECT	47MF	20%	16V	
C462	1-124-589-11	ELECT	47MF	20%	16V	
C490	1-101-004-00	CERAMIC	0.01MF		50V	
C491	1-124-477-11	ELECT	47MF	20%	16V	
C492	1-126-233-11	ELECT	22MF	20%	25V	
C493	1-124-477-11	ELECT	47MF	20%	16V	
C494	1-102-106-00	CERAMIC	100PF	10%	50V	
C495	1-164-070-11	CERAMIC	100PF	5%	50V	
C1402	1-124-589-11	ELECT	47MF	20%	16V	
C1403	1-124-589-11	ELECT	47MF	20%	16V	

<DIODE>

REF.NO.	PART NO.	DESCRIPTION		REMARK
D401	8-719-109-97	DIODE	RD6.8ES-B2	
D402	8-719-110-13	DIODE	RD9.1ES-B2	
D403	8-719-109-97	DIODE	RD6.8ES-B2	
D408	8-719-109-97	DIODE	RD6.8ES-B2	
D409	8-719-109-97	DIODE	RD6.8ES-B2	
D410	8-719-110-13	DIODE	RD9.1ES-B2	
D411	8-719-109-97	DIODE	RD6.8ES-B2	
D415	8-719-110-17	DIODE	RD10ES-B2	
D418	8-719-911-19	DIODE	1SS119	
D419	8-719-911-19	DIODE	1SS119	
D421	8-719-109-97	DIODE	RD6.8ES-B2	
D422	8-719-109-97	DIODE	RD6.8ES-B2	
D423	8-719-109-97	DIODE	RD6.8ES-B2	
D424	8-719-109-97	DIODE	RD6.8ES-B2	
D425	8-719-109-97	DIODE	RD6.8ES-B2	
D426	8-719-109-97	DIODE	RD6.8ES-B2	
D427	8-719-109-97	DIODE	RD6.8ES-B2	

REF.NO.	PART NO.	DESCRIPTION				REMARK
D428	8-719-109-97	DIODE RD6.8ES-B2				
D429	8-719-109-97	DIODE RD6.8ES-B2				
		<IC>				
IC401	8-759-710-68	IC NJM2245S				
IC402	8-759-710-68	IC NJM2245S				
IC405	8-759-710-69	IC NJM2233BS				
IC444	8-752-053-17	IC CXA1114P				
IC1401	8-759-710-69	IC NJM2233BS				
		<JACK>				
J401	1-565-931-11	TERMINAL BLOCK, S 3P				
J402	1-565-840-11	PIN JACK BLOCK 6P				
J403	1-565-931-11	TERMINAL BLOCK, S 3P				
J404	1-565-838-11	JACK BLOCK, PIN 2P				
		<COIL>				
L401	1-408-412-00	INDUCTOR	18UH			
L404	1-410-663-31	INDUCTOR	10UH			
		<TRANSISTOR>				
Q401	8-729-423-37	TRANSISTOR 2SC3311A-QRS				
Q402	8-729-423-37	TRANSISTOR 2SC3311A-QRS				
Q403	8-729-423-44	TRANSISTOR 2SA1309A-QRS				
Q404	8-729-423-44	TRANSISTOR 2SA1309A-QRS				
Q405	8-729-423-37	TRANSISTOR 2SC3311A-QRS				
Q406	8-729-423-37	TRANSISTOR 2SC3311A-QRS				
Q407	8-729-423-44	TRANSISTOR 2SA1309A-QRS				
Q408	8-729-423-37	TRANSISTOR 2SC3311A-QRS				
Q409	8-729-423-37	TRANSISTOR 2SC3311A-QRS				
Q410	8-729-423-37	TRANSISTOR 2SC3311A-QRS				
Q411	8-729-423-44	TRANSISTOR 2SA1309A-QRS				
Q412	8-729-423-44	TRANSISTOR 2SA1309A-QRS				
Q413	8-729-423-44	TRANSISTOR 2SA1309A-QRS				
Q414	8-729-423-44	TRANSISTOR 2SA1309A-QRS				
Q415	8-729-423-37	TRANSISTOR 2SC3311A-QRS				
Q416	8-729-423-37	TRANSISTOR 2SC3311A-QRS				
Q491	8-729-423-37	TRANSISTOR 2SC3311A-QRS				
Q492	8-729-423-37	TRANSISTOR 2SC3311A-QRS				
Q1401	8-729-423-37	TRANSISTOR 2SC3311A-QRS				
		<RESISTOR>				
R401	1-247-804-11	CARBON	75	5%	1/4W	
R402	1-247-804-11	CARBON	75	5%	1/4W	
R403	1-249-434-11	CARBON	27K	5%	1/4W	
R404	1-247-885-00	CARBON	180K	5%	1/4W	
R405	1-247-885-00	CARBON	180K	5%	1/4W	
R406	1-249-434-11	CARBON	27K	5%	1/4W	
R407	1-247-804-11	CARBON	75	5%	1/4W	
R409	1-249-434-11	CARBON	27K	5%	1/4W	
R410	1-247-885-00	CARBON	180K	5%	1/4W	
R411	1-247-804-11	CARBON	75	5%	1/4W	
R413	1-249-434-11	CARBON	27K	5%	1/4W	
R414	1-247-885-00	CARBON	180K	5%	1/4W	
R415	1-249-434-11	CARBON	27K	5%	1/4W	
R416	1-247-885-00	CARBON	180K	5%	1/4W	
R417	1-247-895-00	CARBON	470K	5%	1/4W	
R418	1-249-417-11	CARBON	1K	5%	1/4W	
R419	1-247-895-00	CARBON	470K	5%	1/4W	
R420	1-249-417-11	CARBON	1K	5%	1/4W	
R421	1-247-804-11	CARBON	75	5%	1/4W	
R422	1-247-895-00	CARBON	470K	5%	1/4W	
R423	1-247-895-00	CARBON	470K	5%	1/4W	
R424	1-247-895-00	CARBON	470K	5%	1/4W	
R425	1-247-895-00	CARBON	470K	5%	1/4W	
R426	1-249-424-11	CARBON	3.9K	5%	1/4W	
R427	1-247-895-00	CARBON	470K	5%	1/4W	
R428	1-249-424-11	CARBON	3.9K	5%	1/4W	
R429	1-249-434-11	CARBON	27K	5%	1/4W	
R432	1-249-405-11	CARBON	100	5%	1/4W	
R433	1-249-413-11	CARBON	470	5%	1/4W	
R434	1-249-409-11	CARBON	220	5%	1/4W	
R435	1-249-403-11	CARBON	68	5%	1/4W	
R436	1-249-425-11	CARBON	4.7K	5%	1/4W	
R437	1-247-885-00	CARBON	180K	5%	1/4W	
R438	1-249-405-11	CARBON	100	5%	1/4W	
R439	1-249-413-11	CARBON	470	5%	1/4W	
R440	1-249-417-11	CARBON	1K	5%	1/4W	
R441	1-249-409-11	CARBON	220	5%	1/4W	
R447	1-249-409-11	CARBON	220	5%	1/4W	
R448	1-249-409-11	CARBON	220	5%	1/4W	
R449	1-249-413-11	CARBON	470	5%	1/4W	
R450	1-249-409-11	CARBON	220	5%	1/4W	
R451	1-249-421-11	CARBON	2.2K	5%	1/4W	
R452	1-249-433-11	CARBON	22K	5%	1/4W	
R457	1-249-405-11	CARBON	100	5%	1/4W	
R458	1-249-405-11	CARBON	100	5%	1/4W	
R459	1-249-417-11	CARBON	1K	5%	1/4W	
R460	1-249-405-11	CARBON	100	5%	1/4W	
R461	1-249-417-11	CARBON	1K	5%	1/4W	
R462	1-249-417-11	CARBON	1K	5%	1/4W	
R463	1-249-405-11	CARBON	100	5%	1/4W	
R465	1-249-417-11	CARBON	1K	5%	1/4W	
R466	1-249-405-11	CARBON	100	5%	1/4W	
R467	1-249-405-11	CARBON	100	5%	1/4W	
R468	1-249-433-11	CARBON	22K	5%	1/4W	
R469	1-249-433-11	CARBON	22K	5%	1/4W	
R470	1-249-403-11	CARBON	68	5%	1/4W	
R471	1-249-403-11	CARBON	68	5%	1/4W	
R472	1-249-403-11	CARBON	68	5%	1/4W	
R474	1-249-405-11	CARBON	100	5%	1/4W	
R475	1-249-417-11	CARBON	1K	5%	1/4W	
R476	1-249-433-11	CARBON	22K	5%	1/4W	
R479	1-249-433-11	CARBON	22K	5%	1/4W	
R480	1-249-433-11	CARBON	22K	5%	1/4W	
R481	1-249-433-11	CARBON	22K	5%	1/4W	
R483	1-249-417-11	CARBON	1K	5%	1/4W	
R484	1-215-455-00	METAL	27K	1%	1/4W	
R485	1-215-475-00	METAL	180K	1%	1/4W	
R486	1-215-455-00	METAL	27K	1%	1/4W	
R487	1-215-475-00	METAL	180K	1%	1/4W	
R488	1-249-433-11	CARBON	22K	5%	1/4W	
R489	1-249-433-11	CARBON	22K	5%	1/4W	
R490	1-249-417-11	CARBON	1K	5%	1/4W	
R491	1-249-417-11	CARBON	1K	5%	1/4W	
R492	1-249-417-11	CARBON	1K	5%	1/4W	
R493	1-249-431-11	CARBON	15K	5%	1/4W	
R494	1-249-429-11	CARBON	10K	5%	1/4W	
R495	1-249-417-11	CARBON	1K	5%	1/4W	
R496	1-249-425-11	CARBON	4.7K	5%	1/4W	
R497	1-249-417-11	CARBON	1K	5%	1/4W	
R498	1-249-417-11	CARBON	1K	5%	1/4W	
R1401	1-249-405-11	CARBON	100	5%	1/4W	

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REF.NO.	PART NO.	DESCRIPTION				REMARK
R1402	1-249-405-11	CARBON	100	5%	1/4W	
R1403	1-249-417-11	CARBON	1K	5%	1/4W	
R1420	1-249-413-11	CARBON	470	5%	1/4W	
R1421	1-249-413-11	CARBON	470	5%	1/4W	
R1422	1-249-405-11	CARBON	100	5%	1/4W	
R1423	1-249-441-11	CARBON	100K	5%	1/4W	
R1424	1-249-429-11	CARBON	10K	5%	1/4W	
R1425	1-249-429-11	CARBON	10K	5%	1/4W	
		<SWITCH>				
S401	1-571-729-11	SWITCH, SLIDE				
S402	1-554-303-21	SWITCH, KEY BOARD				
		<CONNECTOR>				
U3	*1-564-519-11	PLUG, CONNECTOR 4P				
U4	1-564-523-11	PLUG, CONNECTOR 8P				
U5	*1-568-377-11	CONNECTOR, HINGE (TAB) 7P				
U29	*1-566-941-11	CONNECTOR, HINGE (TAB) 30P				
***						
	*A-1394-303-A	T BOARD, COMPLETE *****************				
		<CAPACITOR>				
C7001	1-130-471-00	MYLAR	0.001MF	5%	50V	
C7002	1-130-471-00	MYLAR	0.001MF	5%	50V	
C7003	1-136-161-00	FILM	0.047MF	5%	50V	
C7004	1-124-907-11	ELECT	10MF	20%	50V	
C7005	1-102-965-00	CERAMIC	39PF	5%	50V	
C7006	1-130-471-00	MYLAR	0.001MF	5%	50V	
C7007	1-136-153-00	FILM	0.01MF	5%	50V	
C7009	1-124-903-11	ELECT	1MF	20%	50V	
C7010	1-130-477-00	MYLAR	0.0033MF	5%	50V	
C7012	1-102-965-00	CERAMIC	39PF	5%	50V	
C7013	1-102-978-00	CERAMIC	220PF	5%	50V	
C7014	1-102-824-00	CERAMIC	470PF	5%	50V	
C7015	1-124-463-00	ELECT	0.1MF	20%	50V	
C7016	1-124-657-00	ELECT	10MF	20%	50V	
C7017	1-102-129-00	CERAMIC	0.01MF	10%	50V	
C7018	1-124-477-11	ELECT	47MF	20%	16V	
C7019	1-124-477-11	ELECT	47MF	20%	16V	
C7021	1-124-477-11	ELECT	47MF	20%	16V	
C7022	1-130-477-00	MYLAR	0.0033MF	5%	50V	
C7024	1-101-005-00	CERAMIC	0.022MF		50V	
C7027	1-124-477-11	ELECT	47MF	20%	16V	
C7028	1-130-479-00	MYLAR	0.0047MF	5%	50V	
C7029	1-124-902-00	ELECT	0.47MF	20%	50V	
C7030	1-130-471-00	MYLAR	0.001MF	5%	50V	
C7031	1-101-888-00	CERAMIC	68PF	5%	50V	
C7032	1-136-153-00	FILM	0.01MF	5%	50V	
C7033	1-102-074-00	CERAMIC	0.001MF	10%	50V	
C7034	1-102-113-00	CERAMIC	390PF	10%	50V	
C7035	1-136-157-00	FILM	0.022MF	5%	50V	
C7036	1-124-903-11	ELECT	1MF	20%	50V	
C7037	1-124-907-11	ELECT	10MF	20%	50V	
C7039	1-126-157-11	ELECT	10MF	20%	16V	
C7057	1-102-978-00	CERAMIC	220PF	5%	50V	
C7070	1-124-925-11	ELECT	2.2MF	20%	50V	
C7071	1-102-978-00	CERAMIC	220PF	5%	50V	
C7072	1-126-101-11	ELECT	100MF	20%	16V	
C7073	1-101-004-00	CERAMIC	0.01MF		50V	

REF.NO.	PART NO.	DESCRIPTION				REMARK
C7074	1-124-463-00	ELECT	0.1MF	20%	50V	
C7075	1-102-978-00	CERAMIC	220PF	5%	50V	
C7201	1-124-910-11	ELECT	47MF	20%	50V	
C7202	1-102-129-00	CERAMIC	0.01MF	10%	50V	
C7203	1-102-978-00	CERAMIC	220PF	5%	50V	
C7204	1-102-978-00	CERAMIC	220PF	5%	50V	
		<NETWORK>				
CP7201	1-236-479-11	NETWORK, C				
CP7203	1-236-479-11	NETWORK, C				
		<DIODE>				
D7001	8-719-911-19	DIODE 1SS119				
D7002	8-719-911-19	DIODE 1SS119				
D7003	8-719-911-19	DIODE 1SS119				
D7004	8-719-911-19	DIODE 1SS119				
D7005	8-719-911-19	DIODE 1SS119				
D7006	8-719-911-19	DIODE 1SS119				
D7008	8-719-911-19	DIODE 1SS119				
D7009	8-719-911-19	DIODE 1SS119				
D7010	8-719-911-19	DIODE 1SS119				
D7011	8-719-911-19	DIODE 1SS119				
D7012	8-719-911-19	DIODE 1SS119				
D7013	8-719-911-19	DIODE 1SS119				
D7014	8-719-911-19	DIODE 1SS119				
D7015	8-719-911-19	DIODE 1SS119				
D7016	8-719-911-19	DIODE 1SS119				
D7017	8-719-110-06	DIODE RD8.2ES-B1				
D7018	8-719-109-93	DIODE RD6.2ES-B2				
D7019	8-719-109-93	DIODE RD6.2ES-B2				
D7020	8-719-109-93	DIODE RD6.2ES-B2				
D7021	8-719-911-19	DIODE 1SS119				
		<IC>				
IC7001	8-752-830-22	IC CXP5068H-057S				
IC7002	8-759-403-44	IC MN1280-S				
IC7201	8-759-929-62	IC LM7812CT				
		<COIL>				
L7001	1-410-671-31	INDUCTOR	47UH			
L7002	1-410-068-11	INDUCTOR	5.6MMH			
L7003	1-410-663-31	INDUCTOR	10UH			
L7004	1-410-478-11	INDUCTOR	47UH			
		<TRANSISTOR>				
Q7001	8-729-423-37	TRANSISTOR 2SC3311A-QRS				
Q7002	8-729-423-37	TRANSISTOR 2SC3311A-QRS				
Q7003	8-729-600-12	TRANSISTOR 2SK108-C				
Q7004	8-729-423-37	TRANSISTOR 2SC3311A-QRS				
Q7005	8-729-423-37	TRANSISTOR 2SC3311A-QRS				
Q7006	8-729-423-37	TRANSISTOR 2SC3311A-QRS				
Q7007	8-729-423-37	TRANSISTOR 2SC3311A-QRS				
Q7008	8-729-423-37	TRANSISTOR 2SC3311A-QRS				
Q7009	8-729-423-37	TRANSISTOR 2SC3311A-QRS				
Q7010	8-729-423-44	TRANSISTOR 2SA1309A-QRS				
Q7011	8-729-423-37	TRANSISTOR 2SC3311A-QRS				
Q7012	8-729-423-37	TRANSISTOR 2SC3311A-QRS				
Q7013	8-729-423-37	TRANSISTOR 2SC3311A-QRS				
Q7014	8-729-423-44	TRANSISTOR 2SA1309A-QRS				
Q7015	8-729-423-37	TRANSISTOR 2SC3311A-QRS				

REF.NO.	PART NO.	DESCRIPTION				REMARK
Q7016	8-729-423-44	TRANSISTOR	2SA1309A-QRS			
Q7017	8-729-423-44	TRANSISTOR	2SA1309A-QRS			
Q7018	8-729-423-37	TRANSISTOR	2SC3311A-QRS			
Q7019	8-729-423-37	TRANSISTOR	2SC3311A-QRS			
Q7020	8-729-423-37	TRANSISTOR	2SC3311A-QRS			
Q7021	8-729-423-44	TRANSISTOR	2SA1309A-QRS			
Q7026	8-729-423-37	TRANSISTOR	2SC3311A-QRS			
Q7027	8-729-423-37	TRANSISTOR	2SC3311A-QRS			
Q7028	8-729-423-37	TRANSISTOR	2SC3311A-QRS			
Q7029	8-729-423-37	TRANSISTOR	2SC3311A-QRS			
Q7030	8-729-423-37	TRANSISTOR	2SC3311A-QRS			
Q7031	8-729-423-44	TRANSISTOR	2SA1309A-QRS			
Q7032	8-729-423-37	TRANSISTOR	2SC3311A-QRS			
Q7033	8-729-423-37	TRANSISTOR	2SC3311A-QRS			
Q7035	8-729-423-37	TRANSISTOR	2SC3311A-QRS			
Q7036	8-729-423-44	TRANSISTOR	2SA1309A-QRS			
Q7037	8-729-423-37	TRANSISTOR	2SC3311A-QRS			
Q7038	8-729-423-44	TRANSISTOR	2SA1309A-QRS			
Q7301	8-729-423-37	TRANSISTOR	2SC3311A-QRS			
		<RESISTOR>				
R7001	1-249-417-11	CARBON	1K	5%	1/4W	
R7002	1-249-423-11	CARBON	3.3K	5%	1/4W	
R7003	1-249-419-11	CARBON	1.5K	5%	1/4W	
R7004	1-249-429-11	CARBON	10K	5%	1/4W	
R7005	1-249-407-11	CARBON	150	5%	1/4W	
R7006	1-249-429-11	CARBON	10K	5%	1/4W	
R7007	1-249-429-11	CARBON	10K	5%	1/4W	
R7008	1-249-421-11	CARBON	2.2K	5%	1/4W	
R7009	1-249-421-11	CARBON	2.2K	5%	1/4W	
R7010	1-249-430-11	CARBON	12K	5%	1/4W	
R7011	1-247-903-00	CARBON	1M	5%	1/4W	
R7012	1-249-429-11	CARBON	10K	5%	1/4W	
R7013	1-249-424-11	CARBON	3.9K	5%	1/4W	
R7014	1-249-423-11	CARBON	3.3K	5%	1/4W	
R7015	1-249-421-11	CARBON	2.2K	5%	1/4W	
R7016	1-249-417-11	CARBON	1K	5%	1/4W	
R7017	1-249-430-11	CARBON	12K	5%	1/4W	
R7018	1-249-429-11	CARBON	10K	5%	1/4W	
R7019	1-249-441-11	CARBON	100K	5%	1/4W	
R7020	1-249-425-11	CARBON	4.7K	5%	1/4W	
R7021	1-247-903-00	CARBON	1M	5%	1/4W	
R7022	1-249-409-11	CARBON	220	5%	1/4W	
R7023	1-249-429-11	CARBON	10K	5%	1/4W	
R7024	1-249-416-11	CARBON	820	5%	1/4W	
R7025	1-249-425-11	CARBON	4.7K	5%	1/4W	
R7026	1-249-429-11	CARBON	10K	5%	1/4W	
R7027	1-249-414-11	CARBON	560	5%	1/4W	
R7028	1-249-429-11	CARBON	10K	5%	1/4W	
R7029	1-249-425-11	CARBON	4.7K	5%	1/4W	
R7030	1-249-429-11	CARBON	10K	5%	1/4W	
R7031	1-249-421-11	CARBON	2.2K	5%	1/4W	
R7032	1-249-417-11	CARBON	1K	5%	1/4W	
R7033	1-249-437-11	CARBON	47K	5%	1/4W	
R7034	1-249-437-11	CARBON	47K	5%	1/4W	
R7035	1-249-437-11	CARBON	47K	5%	1/4W	
R7036	1-249-429-11	CARBON	10K	5%	1/4W	
R7038	1-249-417-11	CARBON	1K	5%	1/4W	
R7040	1-249-423-11	CARBON	3.3K	5%	1/4W	
R7041	1-249-429-11	CARBON	10K	5%	1/4W	
R7042	1-249-425-11	CARBON	4.7K	5%	1/4W	
R7043	1-249-432-11	CARBON	18K	5%	1/4W	
R7044	1-249-426-11	CARBON	5.6K	5%	1/4W	

REF.NO.	PART NO.	DESCRIPTION				REMARK
R7046	1-249-416-11	CARBON	820	5%	1/4W	
R7047	1-249-429-11	CARBON	10K	5%	1/4W	
R7048	1-249-429-11	CARBON	10K	5%	1/4W	
R7063	1-249-405-11	CARBON	100	5%	1/4W	
R7064	1-249-405-11	CARBON	100	5%	1/4W	
R7066	1-249-405-11	CARBON	100	5%	1/4W	
R7068	1-249-438-11	CARBON	56K	5%	1/4W	
R7069	1-249-433-11	CARBON	22K	5%	1/4W	
R7079	1-249-413-11	CARBON	470	5%	1/4W	
R7080	1-249-417-11	CARBON	1K	5%	1/4W	
R7081	1-249-421-11	CARBON	2.2K	5%	1/4W	
R7082	1-249-417-11	CARBON	1K	5%	1/4W	
R7083	1-249-419-11	CARBON	1.5K	5%	1/4W	
R7084	1-249-418-11	CARBON	1.2K	5%	1/4W	
R7085	1-249-421-11	CARBON	2.2K	5%	1/4W	
R7086	1-249-429-11	CARBON	10K	5%	1/4W	
R7087	1-249-429-11	CARBON	10K	5%	1/4W	
R7088	1-249-405-11	CARBON	100	5%	1/4W	
R7089	1-249-427-11	CARBON	6.8K	5%	1/4W	
R7090	1-249-427-11	CARBON	6.8K	5%	1/4W	
R7091	1-249-433-11	CARBON	22K	5%	1/4W	
R7092	1-249-421-11	CARBON	2.2K	5%	1/4W	
R7093	1-247-889-00	CARBON	270K	5%	1/4W	
R7094	1-249-427-11	CARBON	6.8K	5%	1/4W	
R7095	1-249-412-11	CARBON	390	5%	1/4W	
R7096	1-249-426-11	CARBON	5.6K	5%	1/4W	
R7097	1-249-423-11	CARBON	3.3K	5%	1/4W	
R7098	1-249-433-11	CARBON	22K	5%	1/4W	
R7099	1-249-437-11	CARBON	47K	5%	1/4W	
R7104	1-249-441-11	CARBON	100K	5%	1/4W	
R7105	1-249-429-11	CARBON	10K	5%	1/4W	
R7106	1-249-434-11	CARBON	27K	5%	1/4W	
R7107	1-249-412-11	CARBON	390	5%	1/4W	
R7108	1-249-423-11	CARBON	3.3K	5%	1/4W	
R7109	1-249-413-11	CARBON	470	5%	1/4W	
R7110	1-249-413-11	CARBON	470	5%	1/4W	
R7111	1-249-417-11	CARBON	1K	5%	1/4W	
R7112	1-249-436-11	CARBON	39K	5%	1/4W	
R7113	1-249-433-11	CARBON	22K	5%	1/4W	
R7114	1-249-432-11	CARBON	18K	5%	1/4W	
R7115	1-249-428-11	CARBON	8.2K	5%	1/4W	
R7116	1-249-425-11	CARBON	4.7K	5%	1/4W	
R7117	1-249-421-11	CARBON	2.2K	5%	1/4W	
R7118	1-249-412-11	CARBON	390	5%	1/4W	
R7119	1-249-405-11	CARBON	100	5%	1/4W	
R7120	1-249-405-11	CARBON	100	5%	1/4W	
R7121	1-249-405-11	CARBON	100	5%	1/4W	
R7122	1-249-405-11	CARBON	100	5%	1/4W	
R7124	1-249-429-11	CARBON	10K	5%	1/4W	
R7125	1-249-422-11	CARBON	2.7K	5%	1/4W	
R7126	1-247-895-00	CARBON	470K	5%	1/4W	
R7127	1-247-903-00	CARBON	1M	5%	1/4W	
R7128	1-249-429-11	CARBON	10K	5%	1/4W	
R7129	1-249-421-11	CARBON	2.2K	5%	1/4W	
R7130	1-249-417-11	CARBON	1K	5%	1/4W	
R7131	1-249-421-11	CARBON	2.2K	5%	1/4W	
R7132	1-249-429-11	CARBON	10K	5%	1/4W	
R7133	1-249-431-11	CARBON	15K	5%	1/4W	
R7201	1-216-379-11	METAL OXIDE	6.8	5%	2W	F
R7301	1-249-437-11	CARBON	47K	5%	1/4W	
R7302	1-249-441-11	CARBON	100K	5%	1/4W	
R7304	1-249-437-11	CARBON	47K	5%	1/4W	
R7305	1-249-440-11	CARBON	82K	5%	1/4W	

T FO AMPLIFIER

REF.NO.	PART NO.	DESCRIPTION	REMARK
		<CONNECTOR>	
T10	*1-560-124-00	PLUG, CONNECTOR (2.5MM PITCH)	
T11	*1-560-124-00	PLUG, CONNECTOR (2.5MM PITCH)	
T41	*1-508-784-00	PIN, CONNECTOR (5MM PITCH) 1P	
T42	*1-564-505-11	PLUG, CONNECTOR 2P	
T43	*1-560-290-00	PLUG, CONNECTOR (2.5MM PITCH)	
T51	*1-564-506-11	PLUG, CONNECTOR 3P	
T52	*1-564-505-11	PLUG, CONNECTOR 2P	
T53	*1-564-508-11	PLUG, CONNECTOR 5P	
T63	*1-564-507-11	PLUG, CONNECTOR 4P	
		<CRYSTAL>	
X7001	1-577-071-11	VIBRATOR, CERAMIC	

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REF.NO.	PART NO.	DESCRIPTION	REMARK
	*1-629-628-11	FO BOARD ********	

****

REF.NO.	PART NO.	DESCRIPTION				REMARK
	9-900-614-01	AMPLIFIER BOARD (INCLUDING FUSE BOARD) ***************				
		<CAPACITOR>				
C1	1-102-824-00	CERAMIC	470PF	5%	50V	
C2	1-102-824-00	CERAMIC	470PF	5%	50V	
C3	1-102-824-00	CERAMIC	470PF	5%	50V	
C4	1-102-824-00	CERAMIC	470PF	5%	50V	
C5	1-124-925-11	ELECT	2.2MF	20%	50V	
C6	1-124-925-11	ELECT	2.2MF	20%	50V	
C7	1-124-925-11	ELECT	2.2MF	20%	50V	
C8	1-130-485-00	MYLAR	0.015MF	5%	50V	
C9	1-136-156-00	MYLAR	0.018MF	5%	50V	
C10	1-130-480-00	MYLAR	0.0056MF	5%	50V	
C11	1-130-490-11	MYLAR	0.039MF	5%	50V	
C12	1-102-125-00	CERAMIC	0.0047MF	10%	50V	
C13	1-124-925-11	ELECT	2.2MF	20%	50V	
C14	1-102-973-00	CERAMIC	100PF	5%	50V	
C15	1-102-973-00	CERAMIC	100PF	5%	50V	
C16	1-124-907-11	ELECT	10MF	20%	50V	
C17	1-102-074-00	CERAMIC	0.001MF	10%	50V	
C18	1-124-903-11	ELECT	1MF	20%	50V	
C19	1-102-973-00	CERAMIC	100PF	5%	50V	
C20	1-124-122-11	ELECT	100MF	20%	50V	
C21	1-124-122-11	ELECT	100MF	20%	50V	
C22	1-102-947-00	CERAMIC	10PF	0.50PF	50V	
C23	1-124-122-11	ELECT	100MF	20%	50V	
C25	1-124-122-11	ELECT	100MF	20%	50V	
C26	1-130-495-00	MYLAR	0.1MF	5%	50V	
C27	1-124-122-11	ELECT	100MF	20%	35V	
C29	1-124-472-11	ELECT	470MF	20%	6.3V	
C30	1-124-472-11	ELECT	470MF	20%	6.3V	
C31	1-124-907-11	ELECT	10MF	20%	50V	
C32	9-900-284-01	ELECT	4700MF		42V	
C33	9-900-284-01	ELECT	4700MF		42V	
C34	1-124-478-11	ELECT	100MF	20%	25V	
C35	1-124-478-11	ELECT	100MF	20%	25V	
C36	1-124-478-11	ELECT	100MF	20%	25V	
C37	1-124-478-11	ELECT	100MF	20%	25V	
C39	9-900-620-01	CAPACITOR	0.01MF			

REF.NO.	PART NO.	DESCRIPTION	REMARK
		<DIODE>	
D1	8-719-802-30	DIODE 1SS176	
D2	9-900-619-01	ZENER DIODE RD15JS(B2)-T	
D3	9-900-618-01	DIODE ERA15-02VH-T	
D4	9-900-617-01	BRIDGE DIODE S4VB20F	
D5	9-900-619-01	ZENER DIODE RD15JS(B2)-T	
D6	9-900-619-01	ZENER DIODE RD15JS(B2)-T	
D7	9-900-618-01	DIODE ERA15-02VH-T	
D8	9-900-618-01	DIODE ERA15-02VH-T	
		<IC>	
IC1	8-759-634-50	IC M5218AL	
IC2	8-759-634-50	IC M5218AL	
IC3	8-759-634-50	IC M5218AL	
IC4	9-900-285-01	IC (POWER AMP) STK4030-2	
		<COIL>	
L1	9-900-287-01	COIL (ATH-133-A)	
		<CONNECTOR>	
PL1	*1-560-125-00	PLUG, CONNECTOR (2.5MM) 5P	
PL5	*1-560-290-00	PLUG, CONNECTOR (2.5MM) 2P	
		<TRANSISTOR>	
Q1	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q2	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q3	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q4	9-900-615-01	TRANSISTOR 2SC3243(DE)-T	
Q5	9-900-615-01	TRANSISTOR 2SC3243(DE)-T	
Q6	9-900-616-01	TRANSISTOR 2SA1283(DE)-T	

REF.NO.	PART NO.	DESCRIPTION				REMARK
		<RESISTOR>				
R1	1-249-413-11	CARBON	470	5%	1/4W	
R2	1-249-413-11	CARBON	470	5%	1/4W	
R3	1-249-441-11	CARBON	100K	5%	1/4W	
R4	1-249-441-11	CARBON	100K	5%	1/4W	
R5	1-249-405-11	CARBON	100	5%	1/4W	
R6	1-249-405-11	CARBON	100	5%	1/4W	
R7	1-249-441-11	CARBON	100K	5%	1/4W	
R8	1-249-441-11	CARBON	100K	5%	1/4W	
R9	1-247-836-11	CARBON	1.6K	5%	1/4W	
R10	1-247-836-11	CARBON	1.6K	5%	1/4W	
R11	1-249-437-11	CARBON	47K	5%	1/4W	
R12	1-249-437-11	CARBON	47K	5%	1/4W	
R13	1-247-850-11	CARBON	6.2K	5%	1/4W	
R14	1-249-441-11	CARBON	100K	5%	1/4W	
R15	1-249-441-11	CARBON	100K	5%	1/4W	
R16	1-249-441-11	CARBON	100K	5%	1/4W	
R17	1-249-441-11	CARBON	100K	5%	1/4W	
R18	1-249-441-11	CARBON	100K	5%	1/4W	
R20	1-249-421-11	CARBON	2.2K	5%	1/4W	
R21	1-249-438-11	CARBON	56K	5%	1/4W	
R22	1-249-413-11	CARBON	470	5%	1/4W	
R23	1-249-420-11	CARBON	1.8K	5%	1/4W	
R24	1-249-429-11	CARBON	10K	5%	1/4W	
R25	9-900-291-01	FUSIBLE	100		1/4W	F
R26	1-249-438-11	CARBON	56K	5%	1/4W	

AMPLIFIER FUSE

Les composants identifiés par une trame et par une marque ⚠ sont d'une importance critique pour la sécurité. Ne les remplacer que par des pièces de numéro spécifié.

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION				REMARK
R27	9-900-291-01	FUSIBLE	100		1/4W	
R28	9-900-288-01	RESISTOR	10		1/2W	
R29	9-900-288-01	RESISTOR	10		1/2W	
R30	1-249-429-11	CARBON	10K	5%	1/4W	
R31	1-247-852-11	CARBON	7.5K	5%	1/4W	
R32	1-247-426-11	CARBON	5.6K	5%	1/4W	
R33	1-249-441-11	CARBON	100K	5%	1/4W	
R34	9-900-291-01	FUSIBLE	100		1/4W	
R35	9-900-290-01	FUSIBLE	4.7		1/4W	
R36	9-900-290-01	FUSIBLE	4.7		1/4W	
R37	9-900-289-01	RESISTOR	2.7K		1/2W	
R38	9-900-289-01	RESISTOR	2.7K		1/2W	
R39	9-900-290-01	FUSIBLE	4.7		1/4W	

<RELAY>

RL1	⚠9-900-286-01	RELAY (USR1003-A)

<TRANSFORMER>

T1	⚠9-900-281-01	TRANSFORMER, POWER (MTT1005A)

****

FUSE BOARD
****

*1-533-189-11 HOLDER, FUSE

<CAPACITOR>

C41	9-900-621-01	CAPACITOR	0.01MF
C44	9-900-621-01	CAPACITOR	0.01MF

<DIODE>

D9	8-719-200-02	DIODE 10E2

<FUSE>

FU1	⚠9-900-282-01	FUSE (MEK1001-A) 1.25A/125V

<CONNECTOR>

PL2	1-506-348-99	PIN, CONNECTOR 3P

<RELAY>

RL2	⚠9-900-283-01	RELAY (CMSR1002-A)

****

MISCELLANEOUS
****

REF.NO.	PART NO.	DESCRIPTION	REMARK
	⚠1-417-178-11	SELECTOR, ANTENNA (AS-2)	
	⚠1-426-563-11	COIL, DEGAUSSING	
	⚠1-451-502-11	DEFLECTION YOKE [illegible]	
	1-452-032-00	MAGNET, DISK; 10MM ϕ	
	1-452-094-00	MAGNET, ROTATABLE DISK; 15MM ϕ	
	⚠1-452-579-11	NECK ASSY, PICTURE TUBE (NA322)	
	1-544-546-11	SPEAKER BOX (8.7CM)	
	1-544-547-11	SPEAKER BOX (12CM)	
	1-550-689-11	SWIVEL, AUTO	
	*1-556-945-21	CABLE, P-P	
	*1-557-056-31	CABLE, P-P	
	⚠1-590-492-11	CORD, POWER (WITH CONNECTOR)	
	8-741-681-01	IC SBX1681-01	
	9-900-277-01	SPEAKER (MAIN) 8.7CM	
	9-900-278-01	SPEAKER (WOOFER) 12CM	
V901	⚠8-733-031-05	PICTURE TUBE (M74KNF10X)	

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ACCESSORIES AND PACKING MATERIALS
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PART NO.	DESCRIPTION	REMARK
X-4029-701-1	COVER ASSY, TERMINAL	
1-465-766-11	REMOTE COMMANDER (RM-Y108)	
1-417-182-11	CONVERTER (EAC-25) (CND ONLY)	
1-562-443-11	CONNECTOR, ANTENNA (USA ONLY)	
3-752-990-21	MANUAL, INSTRUCTION	
3-752-990-31	MANUAL, INSTRUCTION (CND ONLY)	
*4-030-895-01	JOINT	
*4-032-224-01	CUSHION (UPPER) (ASSY)	
*4-032-225-01	CUSHION (LOWER) (ASSY)	
*4-032-226-01	TRAY	
*4-032-227-01	INDIVIDUAL CARTON	
*4-032-805-01	CUSHION	
*4-033-133-01	SPACER	
*4-386-906-01	SHEET, PROTECTION	
*4-395-035-01	BAG, PROTECTION	
4-843-806-00	STRIKE	
7-685-648-79	SCREW +BVTP 3X12 IT-3	

ACCESSORY

RM-Y108

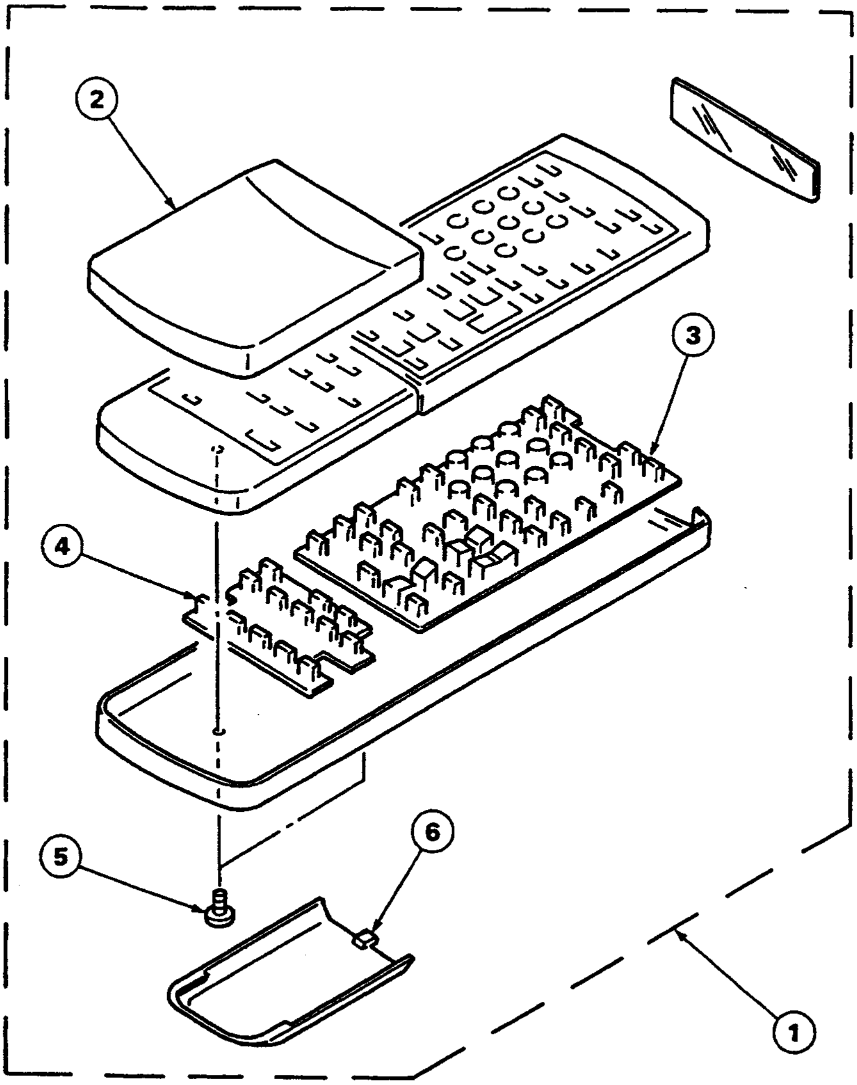
SPECIFICATIONS

Remote control system	Infrared control
Power repuirements	3 Vdc
	2 batteries ICE designation R 6 (size AA)
Dimensions	Approx. 56(w)×31.5(h)×225(d) mm
Weight	Apprpx. 210 g including batteries
Accessories supplied	IEC designation R 6 battery (2)

Design and specifications subject to change without notice.

REMOTE COMMANDER

EXPLODED VIEW



REF.NO.	PART NO.	DESCRIPTION	REMARK
1	1-465-766-11	COMMANDER, REMOTE (RM-Y108)	2-6
2	9-998-909-01	COVER	
3	9-998-907-11	SWITCH RUBBER A	
4	9-998-908-01	SWITCH RUBBER B	
5	9-996-295-01	SCREW-TAPPING M2X6 (B)	
6	9-998-214-01	COVER, BATTERY	